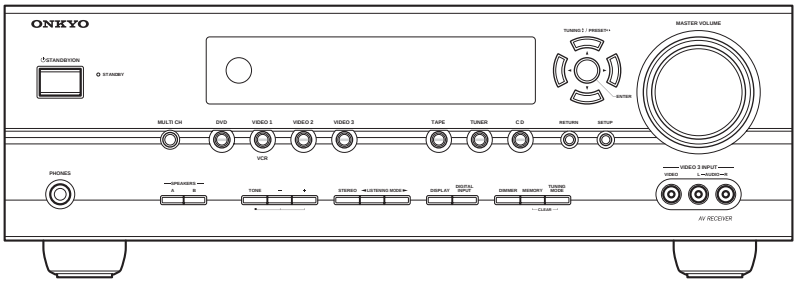
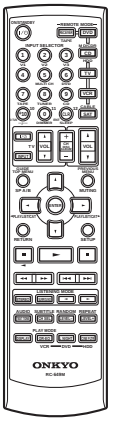
Ref. No. 3940
042006

ONKYO SERVICE MANUAL

AV RECEIVER
MODEL HT-R540





RC-649M

Black and Silver models

B MDD	120V AC, 60Hz
B MDC	120V AC, 60Hz
B MPA	230-240V AC, 50Hz

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S MDC	120V AC, 60Hz
S MPA	230-240V AC, 50Hz

SAFETY-RELATED COMPONENT WARNING!!

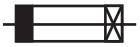
COMPONENTS IDENTIFIED BY MARK ⚠ ON THE SCHEMATIC DIAGRAM AND IN THE PARTS LIST ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE THESE COMPONENTS WITH ONKYO PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL.

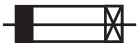
MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

ONKYO®
IMAGINATIVE SIGHT & SOUND

SERVICE PROCEDURE

1. Replacing the fuses


This symbol located near the fuse indicates that the fuse used is slow operating type. For continued protection against fire hazard, replace with same type fuse. For fuse rating, refer to the marking adjacent to the symbol.


Ce symbole indique que le fusible utilise est e lent. Pour une protection permanente, n'utiliser que des fusibles de meme type. Ce demier est indique la qu le present symbol est appose.

REF NO.	PART NAME	DESCRIPTION	PART NO.	REMARKS
F901	FUSE	8A-UL/T-233	252329GR	!, <DD, DC>
F901 or	FUSE	8A-T/UL-ST2	252261GR	!, <DD, DC>
F901	FUSE	4A-SE-EAK FUSE	252077GR	!, <PA>
F901 or	FUSE	4A-SE-TL250V	252277GR	!, <PA>
F903	FUSE	5A-UL/T-233	252326GR	!, <DD, DC>
F903 or	FUSE	5A-T/UL-ST2	252258GR	!, <DD, DC>
F903	FUSE	2.5A-SE-EAK FUSE	252075GR	!, <PA>
F903 or	FUSE	2.5A-SE-TL250V	252275GR	!, <PA>
F6901	FUSE	10A-UL/T-233	252330GR	!
F6901 or	FUSE	10A-T/UL-ST2	252333GR	!
F6902	FUSE	10A-UL/T-233	252330GR	!
F6902 or	FUSE	10A-T/UL-ST2	252333GR	!

<Notes>
<DD> : USA model
<DC> : Canadian model
<PA> : Australian model

2. To initialize the unit

1. Press and hold down VIDEO 1/VCR button, then press STANDBY/ON button when the unit is powered on.
2. After " *Clear* " is displayed, the preset memory and each mode stored in the memory, are initialized and will return to the factory settings.

3. To check version of microprocessor

<Note>
Main microprocessor Q701 only.

1. Press and hold down DISPLAY button, then press STANDBY/ON button when the unit is powered on. The version will be displayed on FL display only for 3 seconds.

Ex. *Ver.1.01/05305a*

2. Press STANDBY/ON button to power off.

4. Memory Backup

The AV receiver uses a battery-less memory backup system in order to retain radio presets and other settings when it is unplugged or in the case of a power failure.
Although no batteries are required, the AV receiver must be plugged into a wall outlet in order to charge the backup system. Once it has been charged, the AV receiver will retain the settings for several weeks, although this depends on the environment and will be shorter in humid climates.

OPERATION CHECK-1

SPEAKER PROTECT-1 (DC VOLTAGE DETECTION)

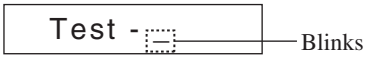
[When]

1. Exchange power transistors (Q6050 - Q6056, Q6060 - Q6066).
2. Exchange amplifier PC board ass'y (NAAF-8779).

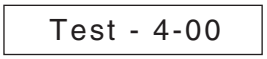
[Procedure]

<Note> No load. No input.

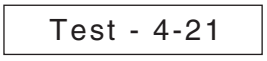
1. Press and hold down CD button, then press STANDBY/ON button while the unit is powered on.
   " Test - _ " is displayed only for 5 seconds.



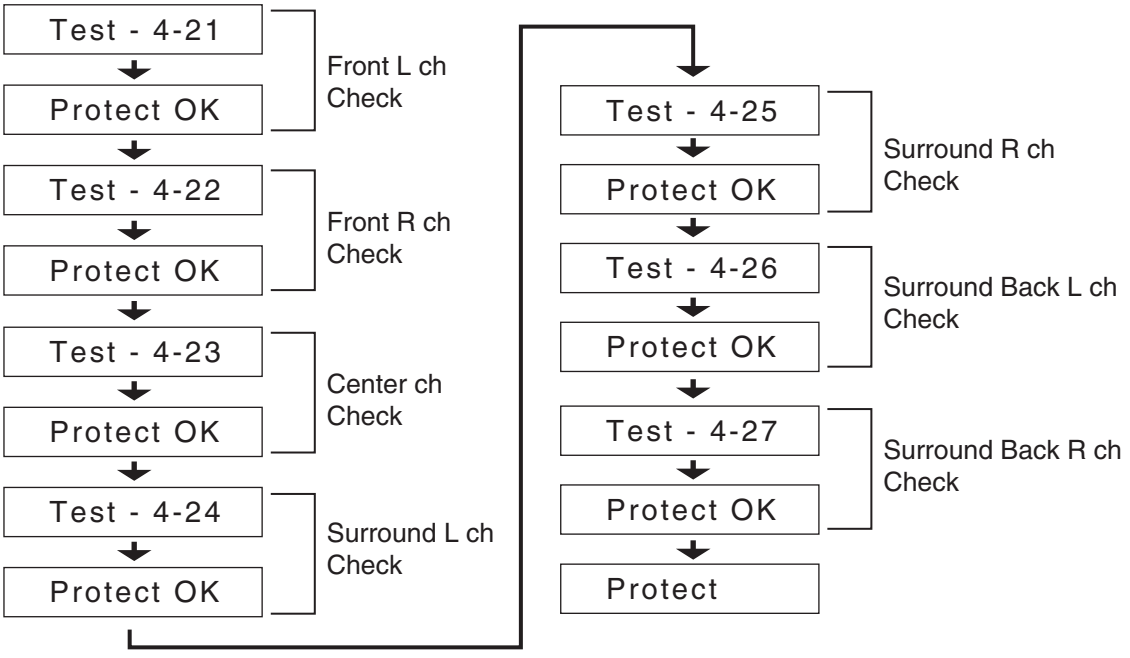
2. Press VIDEO 3 button while the characters of " Test - _ " are displayed.
   The unit will be in the state of " Test-4-00 ".



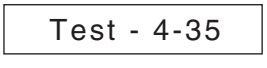
3. Repeatedly press +(TONE) button until the characters of " Test-4-21 " are displayed.



Check whether the operation starts and continues automatically as follows.



If all channels are OK, the characters of " Test-4-35 " are displayed.



4. Press STANDBY/ON button.

OPERATION CHECK-2

SPEAKER PROTECT-2 (CURRENT DETECTION)

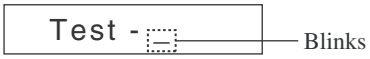
[When]

1. Exchange power transistors (Q6050 - Q6056, Q6060 - Q6066).
2. Exchange amplifier PC board ass'y (NAAF-8779).

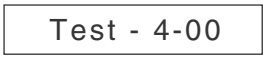
[Procedure]

<Note> No input.
Do not check two or more channels at the same time.
Do not connect a dummy load to speaker terminal longer than 2 seconds.

1. Press and hold down CD button, then press STANDBY/ON button while the unit is powered on.
" Test - _ " is displayed only for 5 seconds.

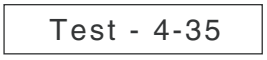


2. Press VIDEO 3 button, while " Test - _ " is displayed.
The unit will be in the state of " Test-4-00 ".



3. Repeatedly press +(TONE) button until " Test-4-35 " is displayed.

4. Connect the dummy load of 3 ohms to the Front L ch speaker terminals.
At this time, confirm that the speaker relay is not turned off.



5. Connect the dummy load of 1 ohm to the Front L ch speaker terminals.
At this time, confirm that the speaker relay is turned off and " Protect " is displayed.

Disconnect the dummy load immediately after checking the display of " Protect ".

6. Check other channels according to the same procedure as 4 and 5.

7. Press the STANDBY/ON button.

OPERATION CHECK-3

CONTROL OF POWER SUPPLY (OUTPUT SENSOR AND THERMAL SENSOR)

[When]

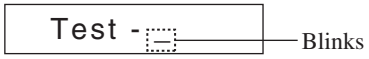
1. Exchange power transistors (Q6050 - Q6056, Q6060 - Q6066).
2. Exchange power amplifier PC board ass'y (NAAF-8779).
3. Exchange thermal sensor PC board ass'y (NAETC-8781).

[Procedure]

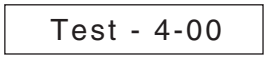
<Note> No output. No input.

Output sensor

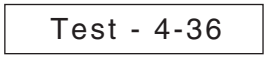
1. Press and hold down CD button, then press STANDBY/ON button while the unit is powered on.
   " Test - _ " is displayed only for 5 seconds.



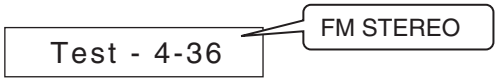
2. Press VIDEO 3 button while " Test - _ " is displayed.
   The unit will be in the state of " Test-4-00 ".



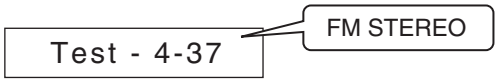
3. Repeatedly press +(TONE) button until " Test-4-36 " is displayed.



4. At this time, confirm that the red characters of " FM STEREO " is displayed.
   And, confirm that the relays RL6901 and RL6902 are turned off in 2 or 3 seconds.



5. Press +(TONE) button and confirm that the red characters of " FM STEREO " is displayed.
   And, confirm that the relays RL6901 and RL6902 are turned off in 2 or 3 seconds.

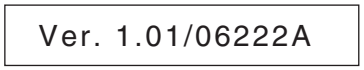


6. Press STANDBY/ON button.

Thermal sensor

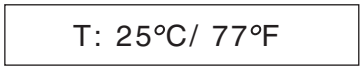
1. Press and hold downDISPLAY button, then pressSTANDBY/ON button when the unit is powered on.
   The microprocessor version will be displayed for 3 seconds.

<Ex.>



2. Press TONE button while the version is displayed.

<Ex.>



3. Confirm that the displayed temperature is within +/-20 ℃ from the ambient temperature.

4. Press STANDBY/ON button.

OPERATION CHECK-4

DEBUG MODE-1

The operations of DSP and DIR etc are able to checked by the information displayed on FL in this debug mode.
This information will help to analysing digital audio no sound trouble.

To set in Debug mode

1. Press and hold down DISPLAY button, then press STANDBY/ON button while the unit is powered on.
   The version number of microprocessor is displayed only for 3 seconds.

<Ex.> `Ver. 101/06222A`

1. Press TONE+ button within 3 seconds above, the version number of DSP will be displayed for 5 seconds.

<Ex.> `DSP :06206A`

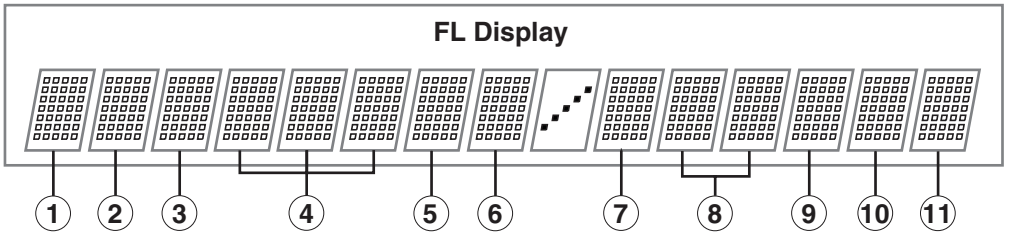
2. Press DISPLAY button while the DSP version is displayed. The status of DSP and DIR etc will be displayed.

<Ex.> `E1A48K0N/OFFPoO`

To exit

Press STANDBY/ON button.

Content of Display



---------- DIR ----------

① DIR Input
E = UNLOCK
= LOCK

② Digital Selector
0 = None
1 = COAXIAL
2 =
3 = OPT 1
4 = OPT 2
5 =
6 = OPT 3
7 =

③ DIR Status
D = Digital
A = Analog
M = Multich
P = Multich PCM
p = PCM Fixed
d = DTS Fixed

④ Sampling Frequency and Emphasis
32K = 32 kHz without Emphasis
44K = 44.1 kHz without Emphasis
48K = 48kHz without Emphasis
64K = 64 kHz
88K = 88.2 kHz
96K = 96 kHz
176 = 176.4 kHz
192 = 192 kHz
32e = 32 kHz with Emphasis
44e = 44.1 kHz with Emphasis
48e = 48 kHz with Emphasis

⑤ CODEC Clock Mode
N = Normal
U = Up Sampling
H = High Sampling (Double Rate)
D = Down Sampling
Q = Quad Rate

⑥ DIR Detect Type
0 = Analog
1 = PCM
2 = Not PCM
3 = Data
4 = DTS CD (Not used)
5 = Multich
6 = Not Decided

---------- DSP ----------

⑦ DSP Port
0 = NIC —— (Normal state)
1 = DEC
2 = BUSY (Abnormal state)
3 = EXEC WAIT

⑧ DSP Sequence
04 = Boot
11 = Restart
FF = Free

⑨ DSP Detect Format
P = PCM (Analog)
D = Dolby Digital
d = DTS
A = AAC
? = Unknown

⑩ DSP Decode
o = Decode OK
x = Decode NG

------- Main Microprocessor --------

⑪ Mute output IC
0 = Selector IC(Q5501)
1
2 = DSP(Q201)
3 = DIR(Q301)

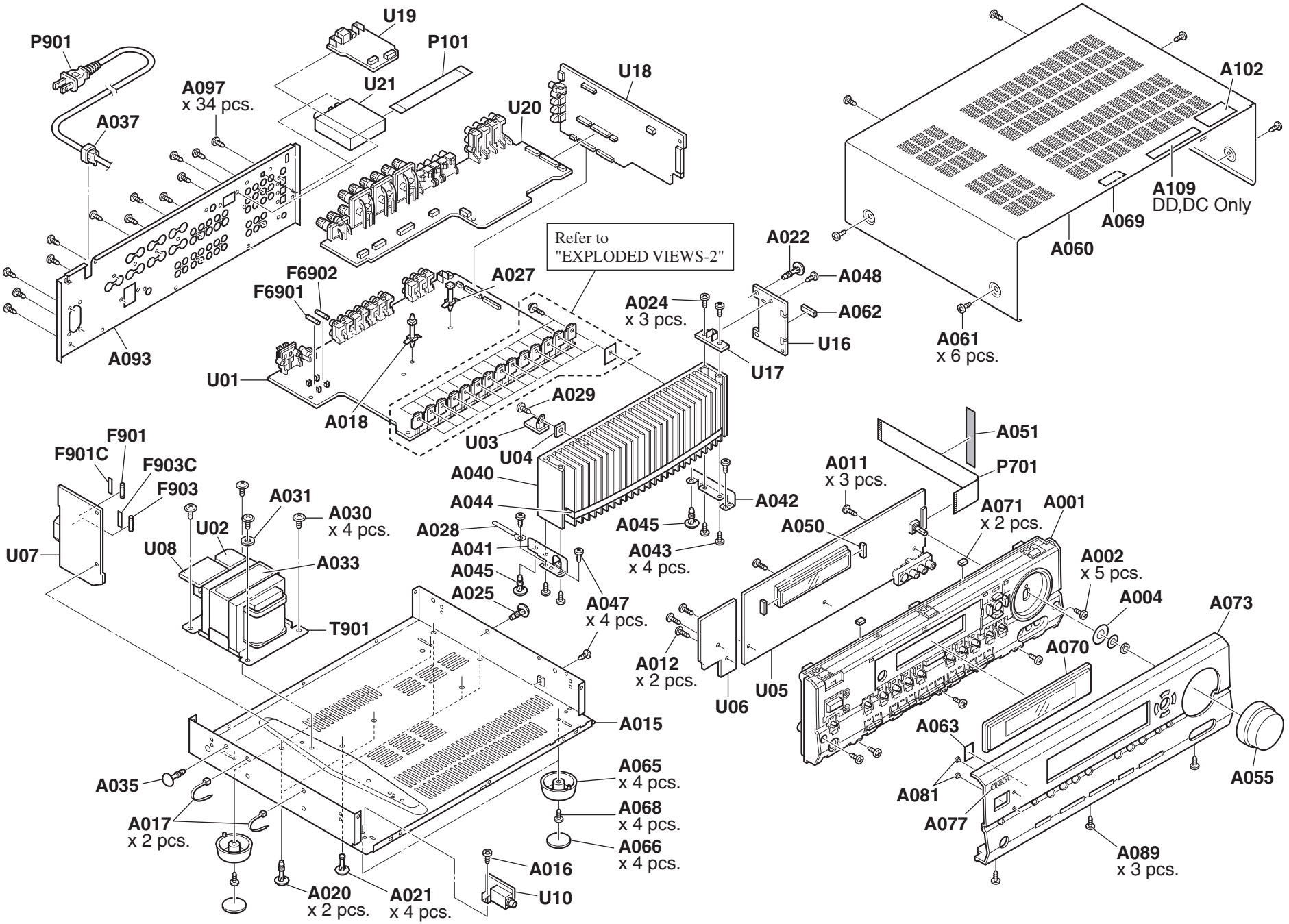
OPERATION CHECK-5
DEBUG MODE-2

Trouble Cause Analysis by Debug Mode

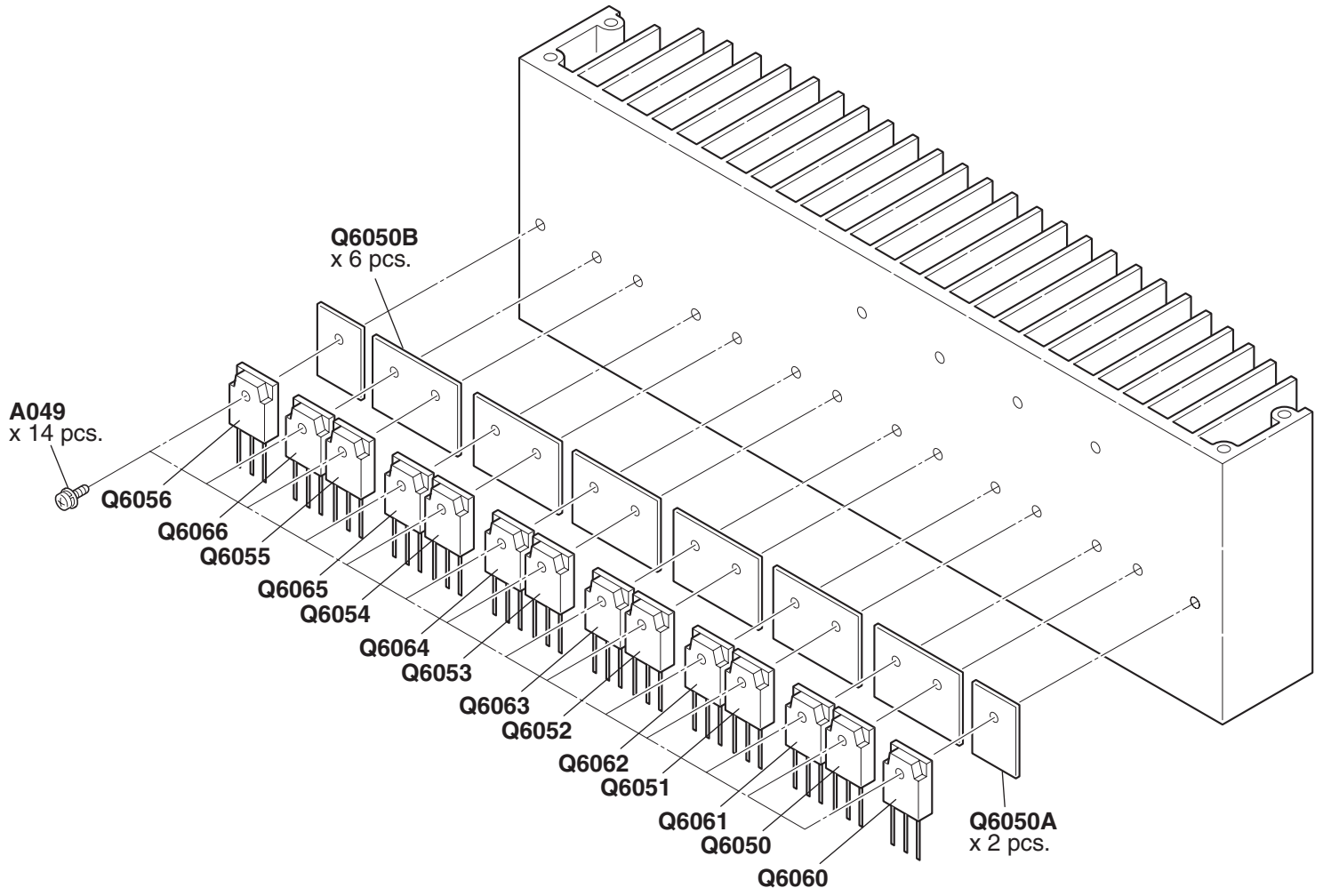
This debug mode will help in analysing digital audio no sound trouble.
Check information on FL display and the related devices or circuits.

Digit No. on FL	Symptom on Display	Cause	Check
①	"E" is displayed	No input signal to DIR	Related devices from digital input to Q301
④	Displayed freq. is different from input signal freq.	No input signal to DIR	Related devices from digital input to Q301
⑥	Displayed format is different from input signal format	No input signal to DIR	Related devices from digital input to Q301
⑧	"04" or "11" do not change to "FF"	ROM or RAM error	Q281, Q282 & related devices
⑨	Displayed format is different from input signal format	Input signal to DSP is no good	Related devices from Q301 to Q201
⑩	"x" is displayed	Interface between DSP and Microprocessor is no good	Related devices from Q701 to Q201
⑪	This identifies IC which outputs error	The IC outputs error to main microprocessor	Q5501, Q201, Q301 & related devices

EXPLODED VIEWS-1



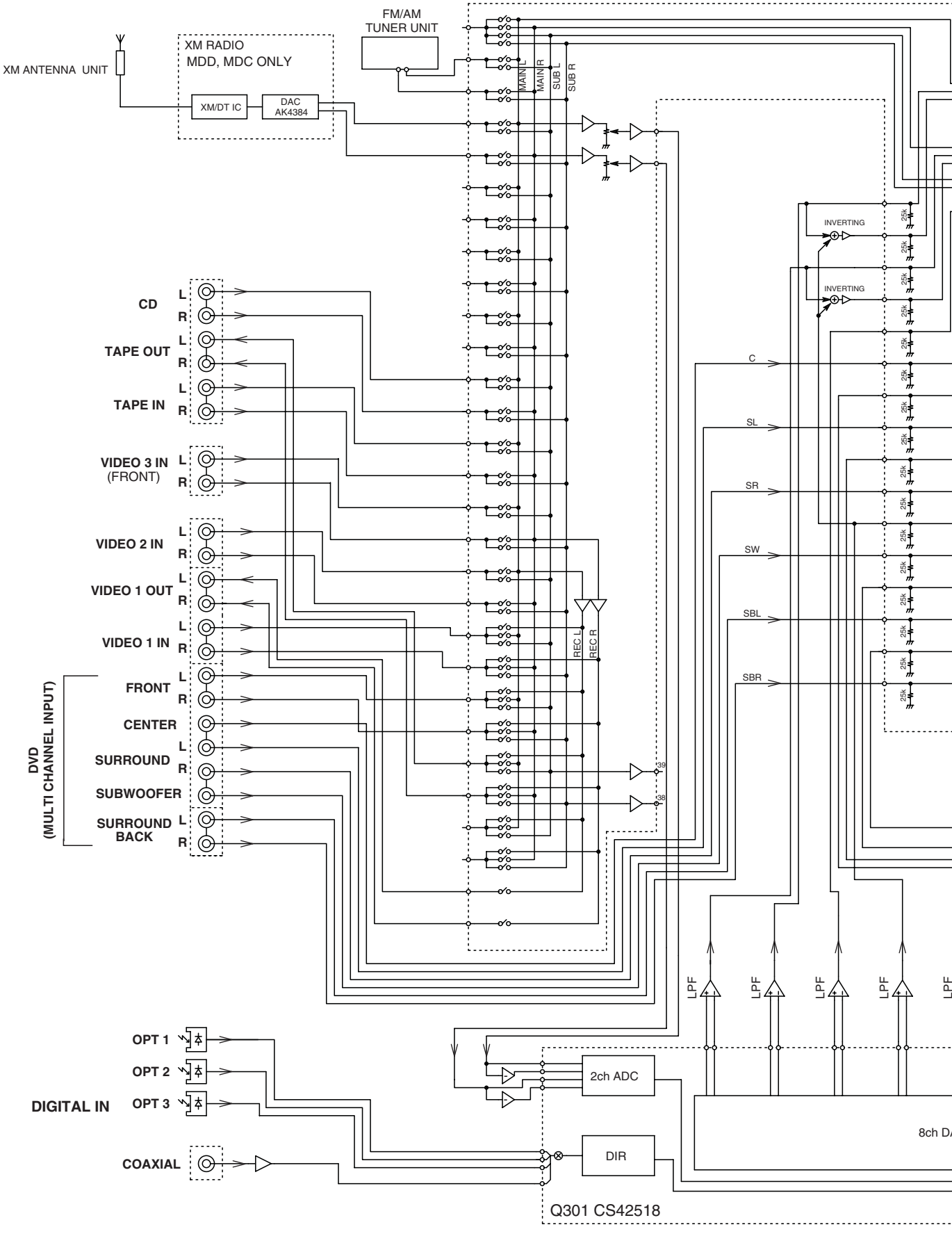
EXPLODED VIEWS-2



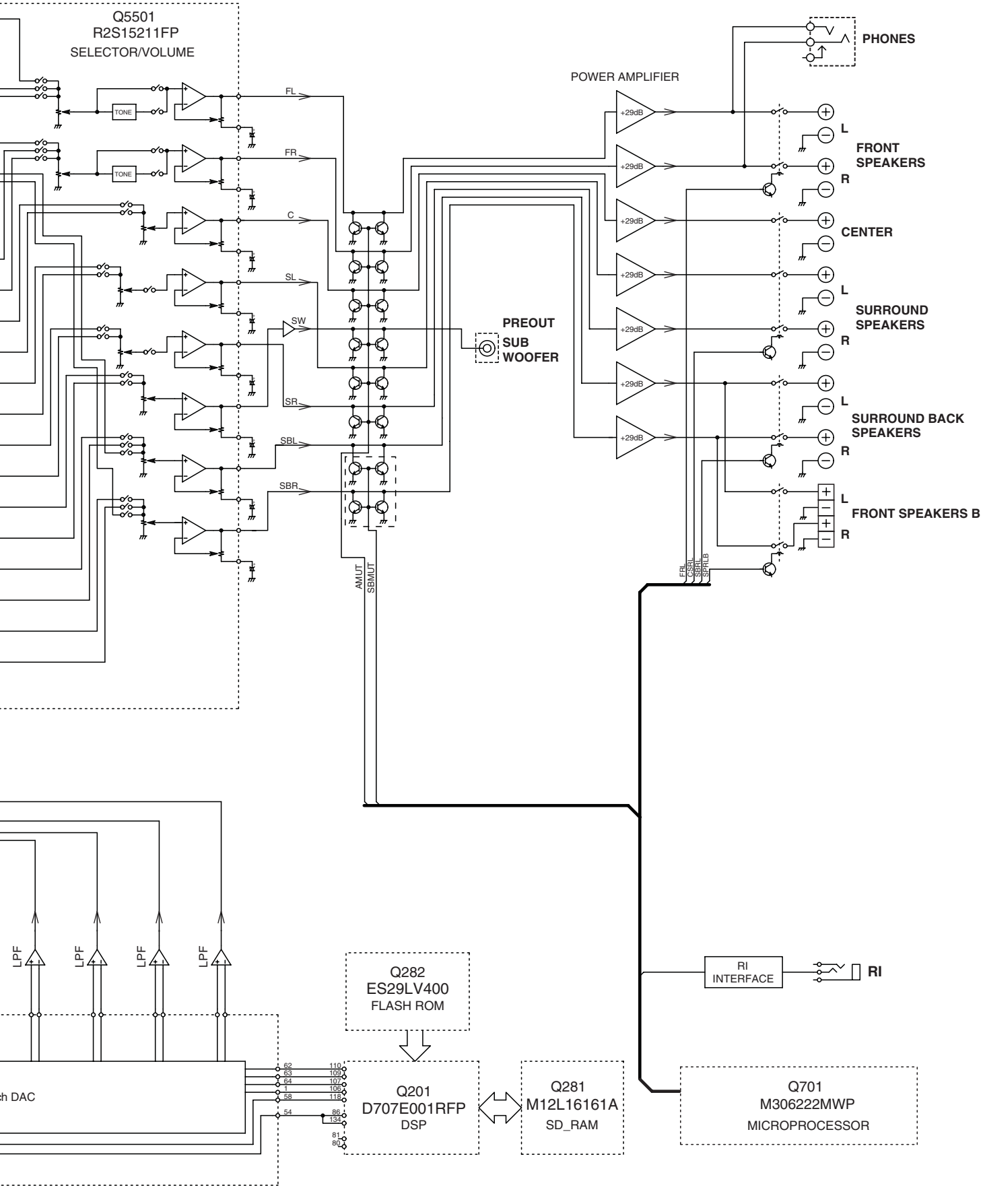
HT-R540

BLOCK DIAGRAMS-1

AUDIO SECTION

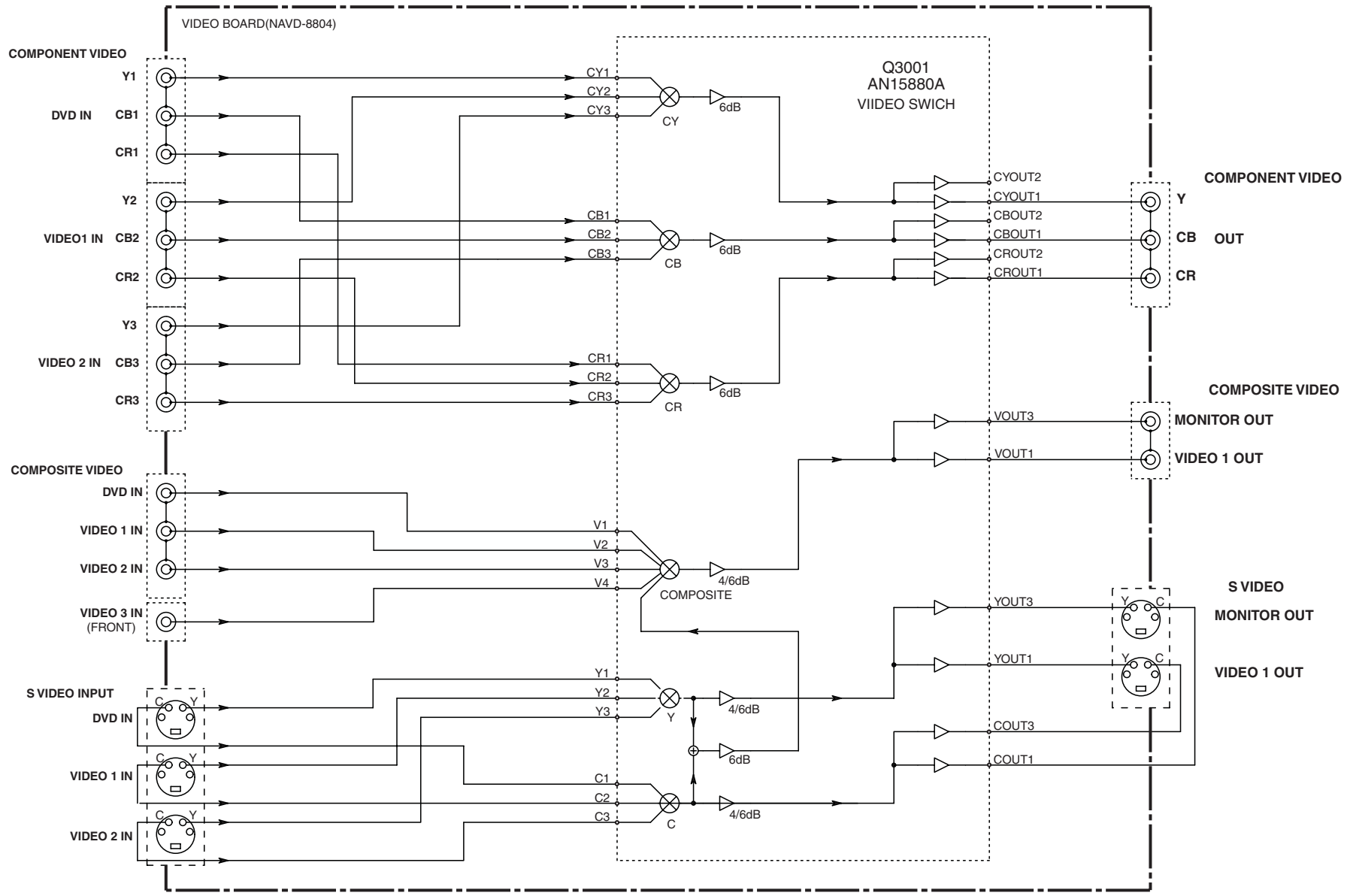


E F G H


Q5501
R2S15211FP
SELECTOR/VOLUME
TONE
TONE
FL
FR
C
SL
SW
SR
SBL
SBR
AMUT
SBMUT
POWER AMPLIFIER
+29dB
+29dB
+29dB
+29dB
+29dB
+29dB
+29dB
PREOUT
SUB WOOFER
PHONES
L
FRONT SPEAKERS
R
CENTER
L
SURROUND SPEAKERS
R
L
SURROUND BACK SPEAKERS
R
L
FRONT SPEAKERS B
R
FRL
CSRL
SBRL
SPRLB
LPF
LPF
LPF
LPF
ch DAC
62
63
64
1
58
54
110
109
107
106
118
86
134
81
80
Q282
ES29LV400
FLASH ROM
Q201
D707E001RFP
DSP
Q281
M12L16161A
SD_RAM
RI
INTERFACE
RI
Q701
M306222MWP
MICROPROCESSOR

BLOCK DIAGRAMS-2

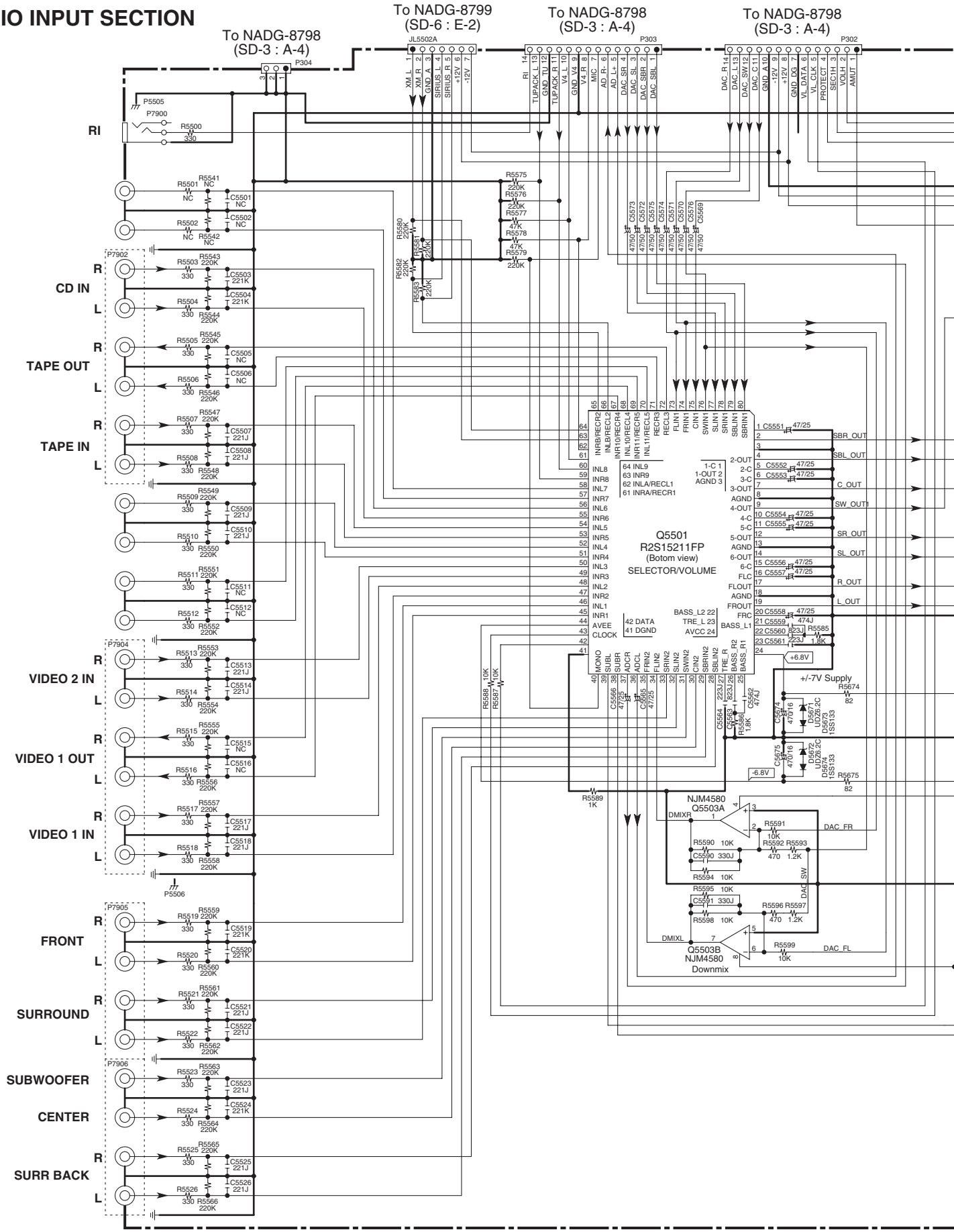
VIDEO SECTION



HT-R540

SCHEMATIC DIAGRAMS-1

AUDIO INPUT SECTION



E F G H

<Note>

NC = No mount of parts.

SD-Z : XY

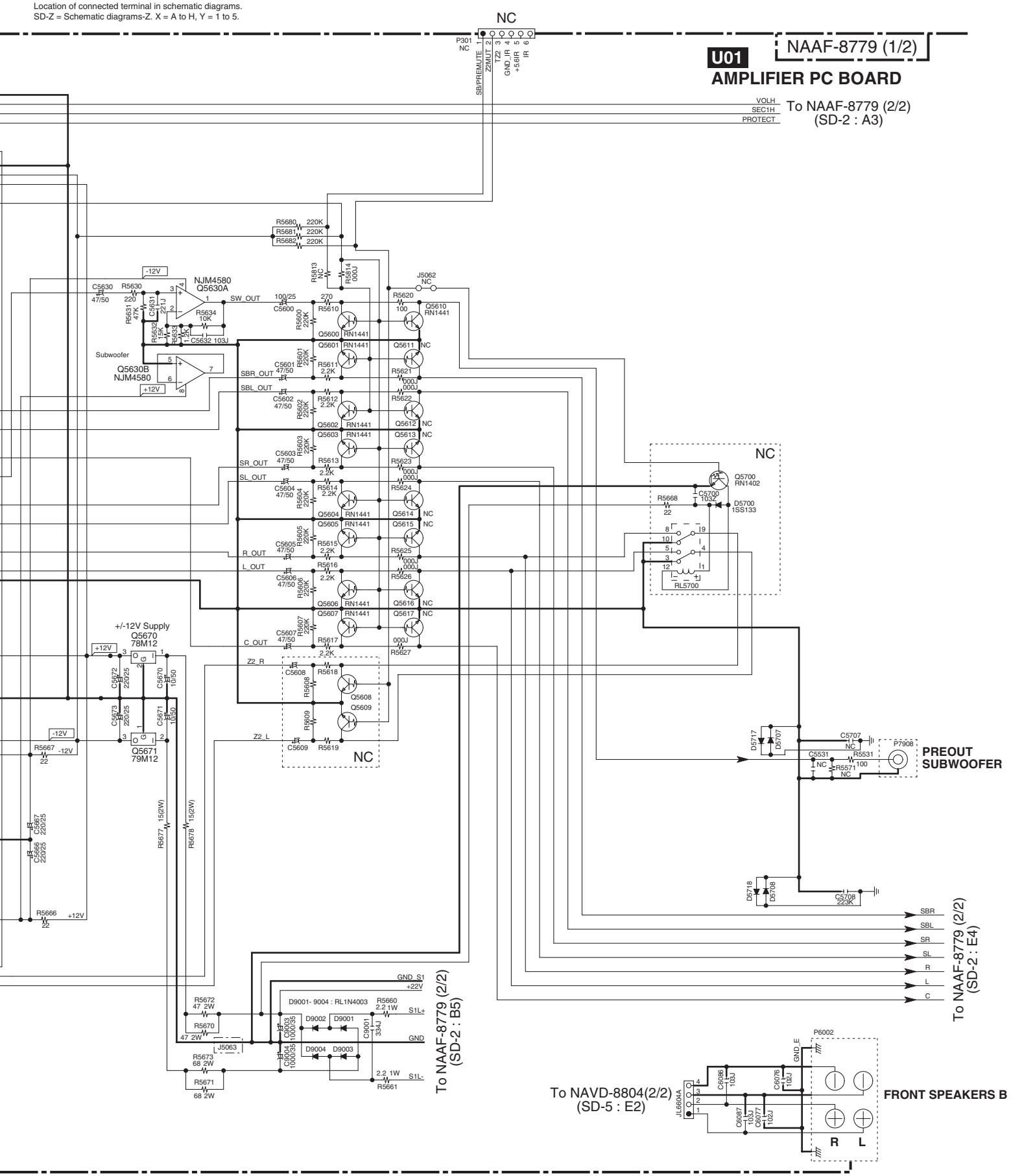
Location of connected terminal in schematic diagrams.

SD-Z = Schematic diagrams-Z. X = A to H, Y = 1 to 5.

NAAF-8779 (1/2)

U01

AMPLIFIER PC BOARD



SCHEMATIC DIAGRAMS-2

POWER AMPLIFIER SECTION

<Note>

NC = No mount of parts.

SD-Z : XY

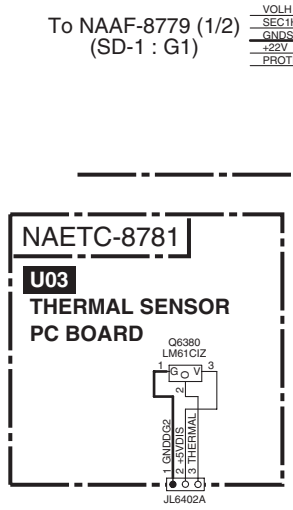
Location of connected terminal in schematic diagrams.

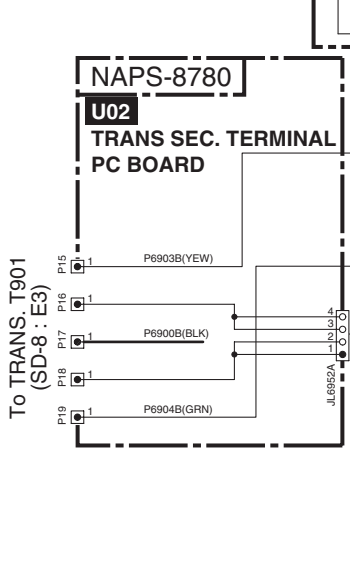
SD-Z = Schematic diagrams-Z. X = A to H, Y = 1 to 5.

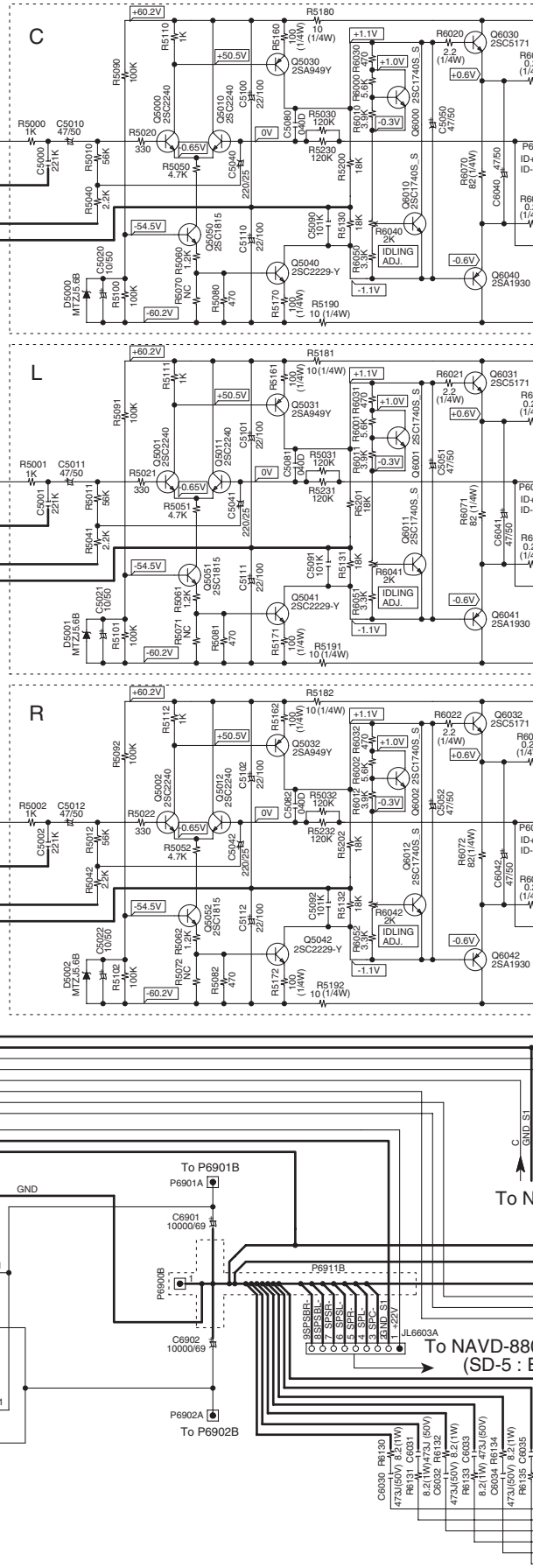
NAAF-8779 (2/2)

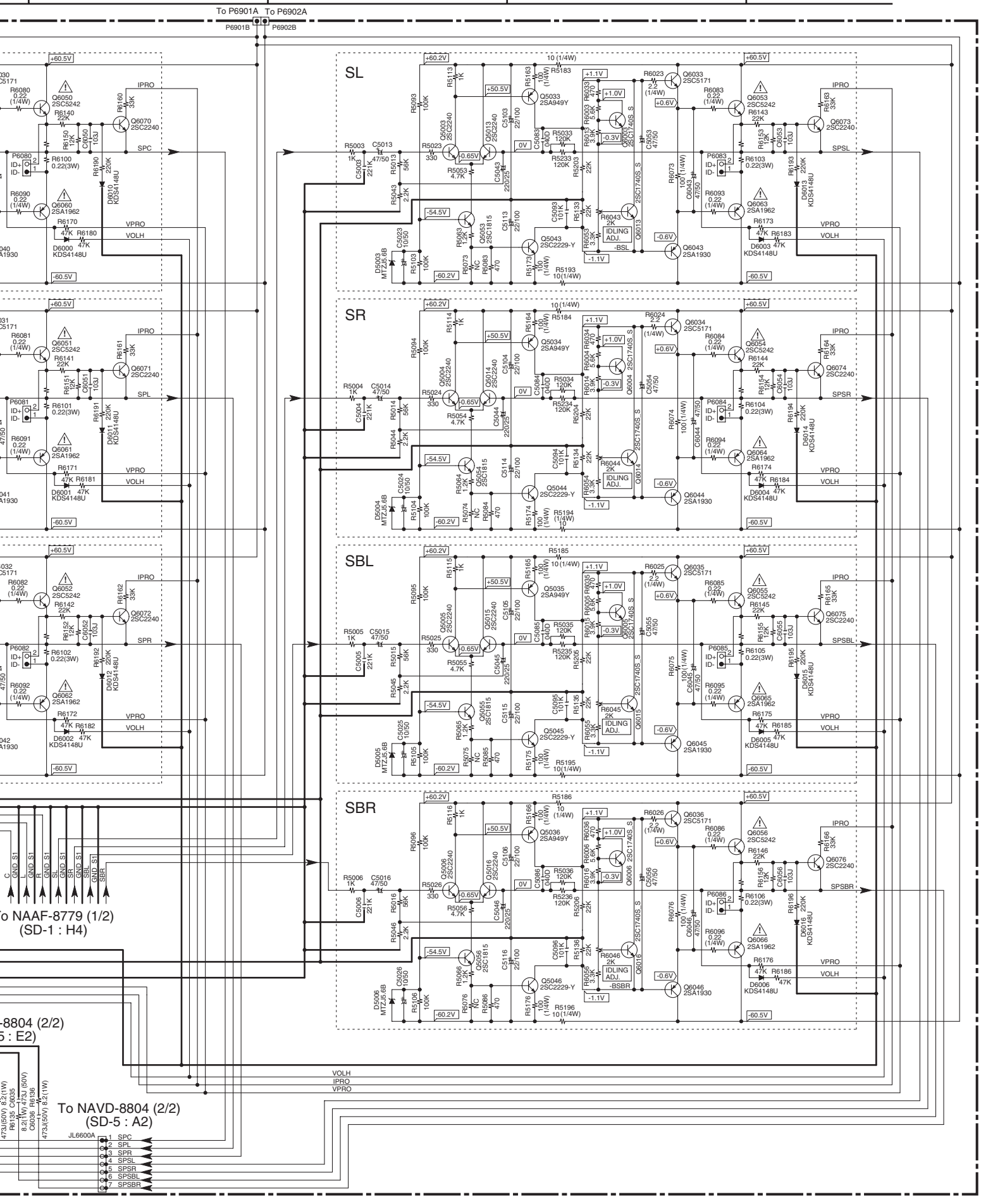
U01

AMPLIFIER PC BOARD



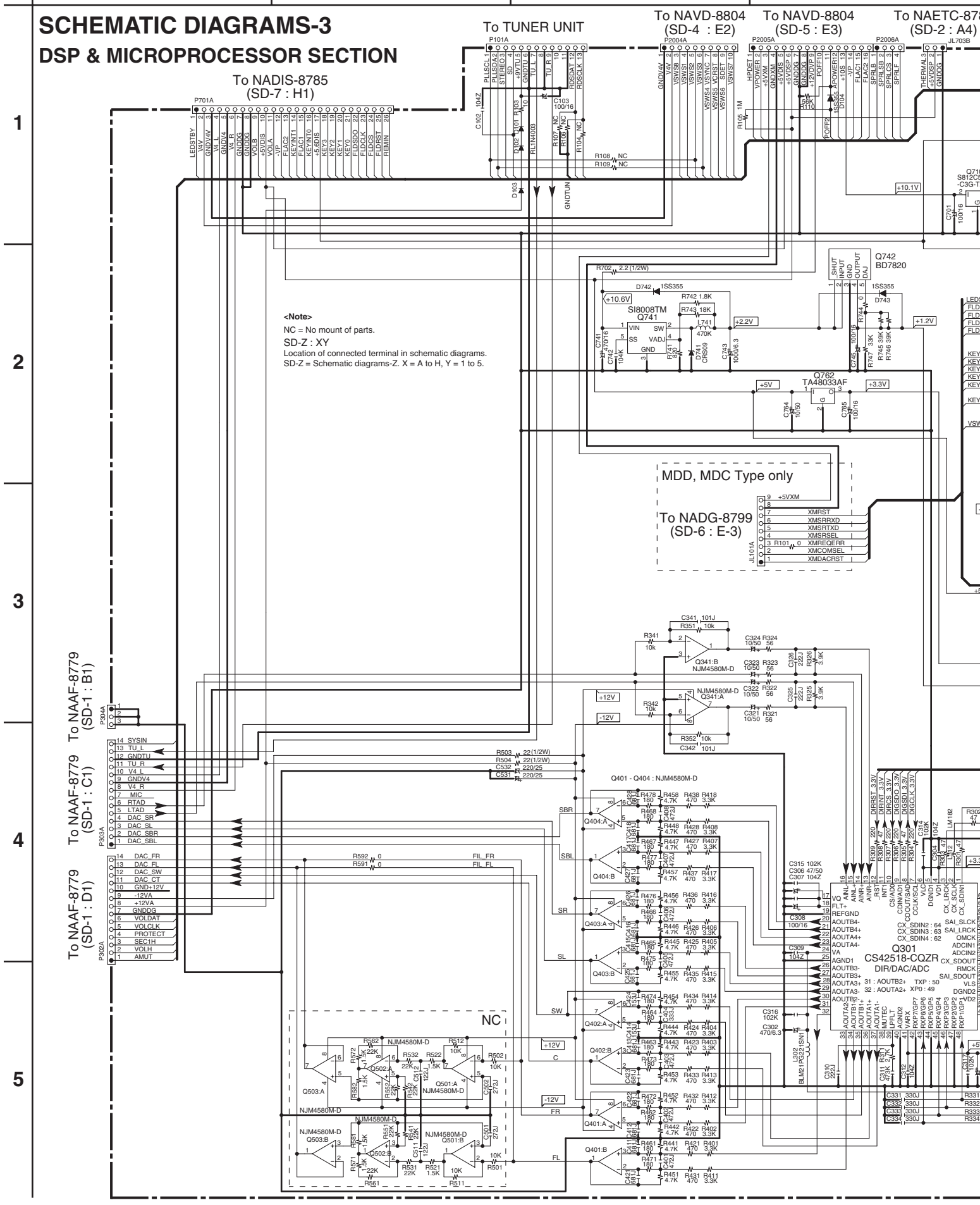





E
F
G
H
To P6901A
To P6902A
P6901B
P6902B
SL
SR
SBL
SBR
IPRO
VPRO
VOLH
SPC
SPL
SPR
SPSL
SPSR
SPSBL
SPSBR
-BSL
-BSBR
IDLING ADJ.
To NAAF-8779 (1/2)
(SD-1 : H4)
To NAVD-8804 (2/2)
(SD-5 : A2)
JL6600A

SCHEMATIC DIAGRAMS-3

DSP & MICROPROCESSOR SECTION



E F G H

-8781
A4)
03B

NADG-8798 **U18**

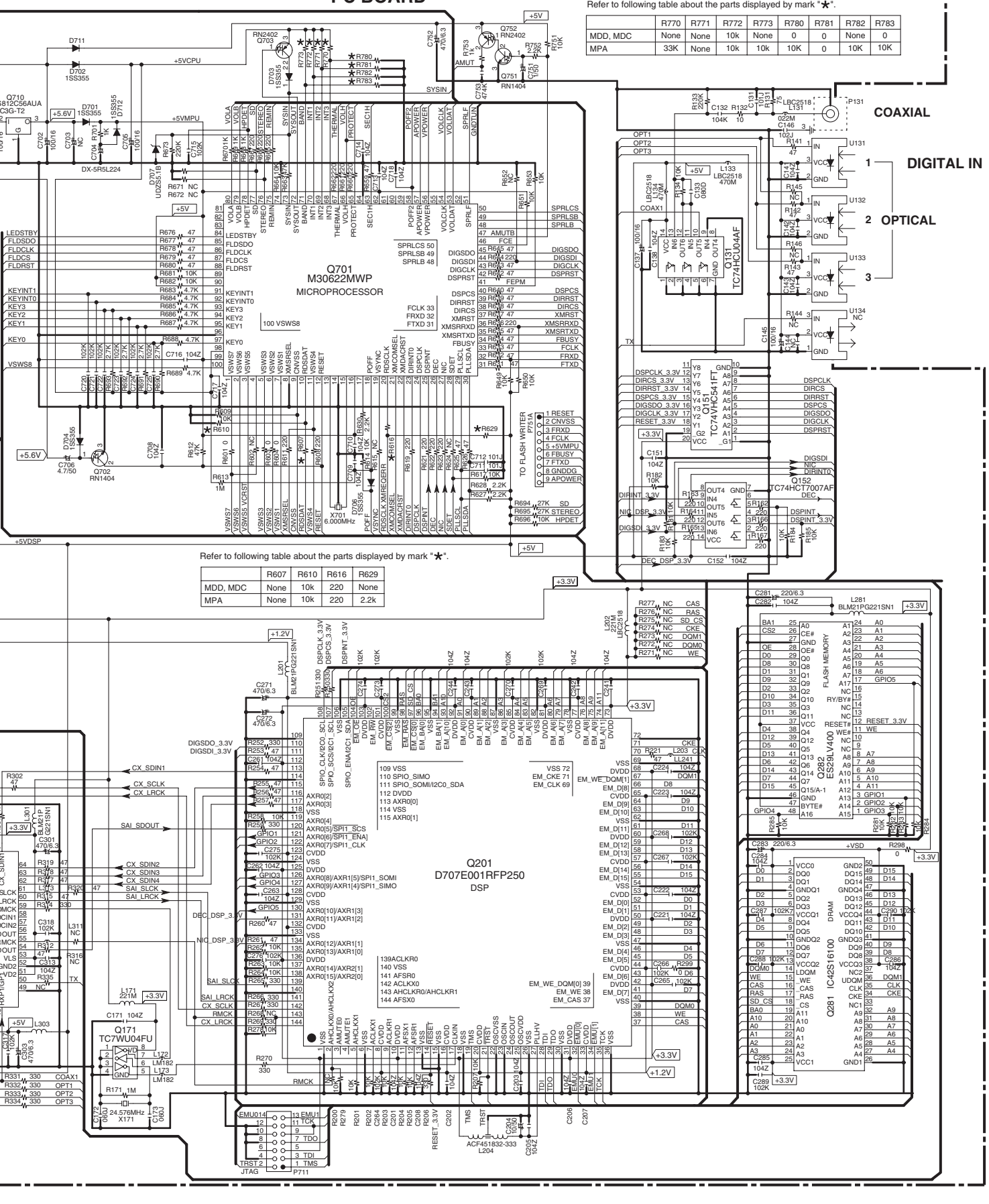
DSP & MICROPROCESSOR PC BOARD

Refer to following table about the parts displayed by mark "★".

	R770	R771	R772	R773	R780	R781	R782	R783
MDD, MDC	None	None	10k	None	0	0	None	0
MPA	33K	None	10k	10k	10K	0	10K	10K

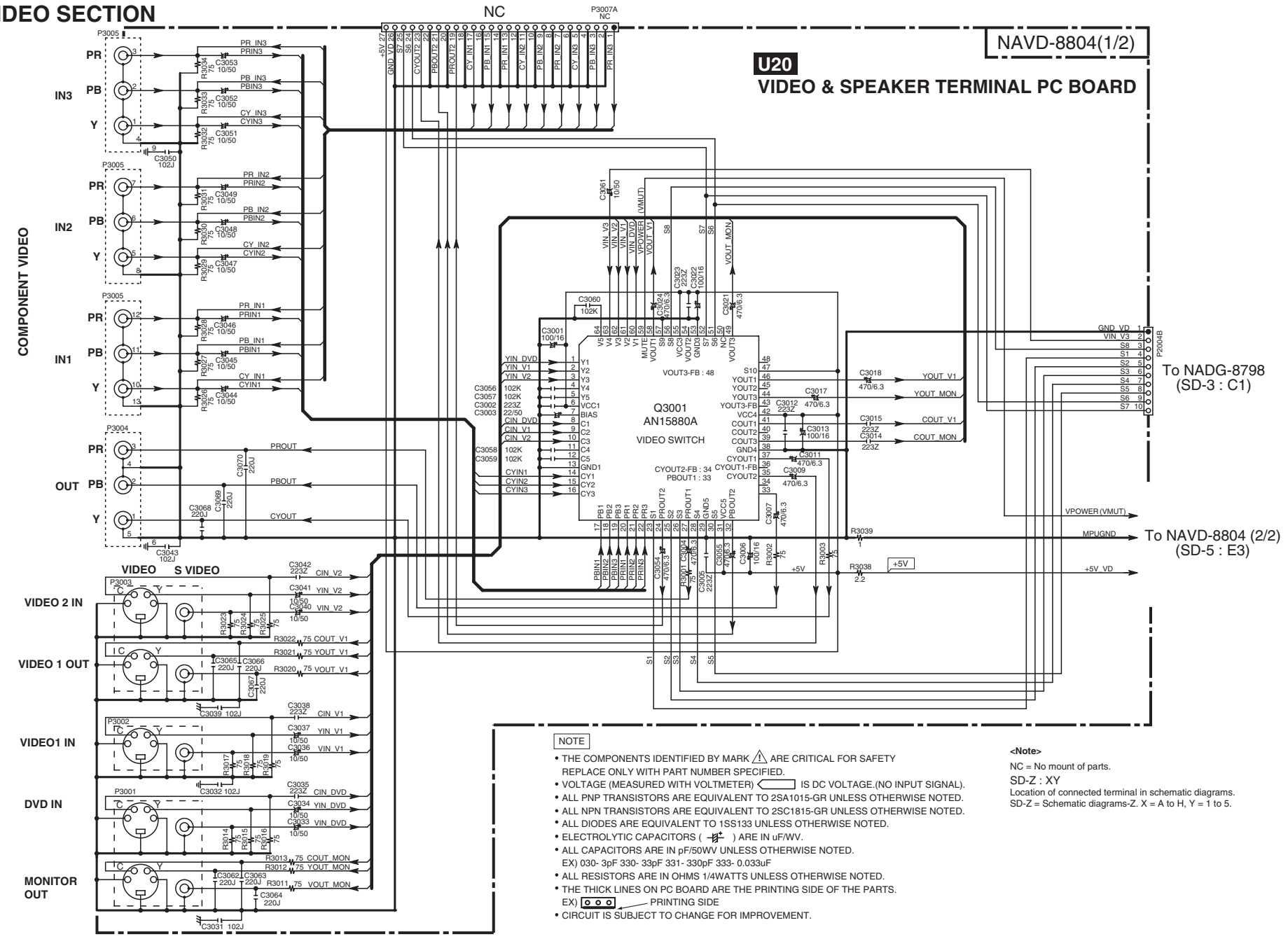
Refer to following table about the parts displayed by mark "★".

	R607	R610	R616	R629
MDD, MDC	None	10k	220	None
MPA	None	10k	220	2.2k



SCHEMATIC DIAGRAMS-4

VIDEO SECTION



NOTE

- THE COMPONENTS IDENTIFIED BY MARK ⚠ ARE CRITICAL FOR SAFETY REPLACE ONLY WITH PART NUMBER SPECIFIED.
- VOLTAGE (MEASURED WITH VOLTMETER) ⟨ ▭ ⟩ IS DC VOLTAGE.(NO INPUT SIGNAL).
- ALL PNP TRANSISTORS ARE EQUIVALENT TO 2SA1015-GR UNLESS OTHERWISE NOTED.
- ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE NOTED.
- ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
- ELECTROLYTIC CAPACITORS (⊣+) ARE IN uF/WV.
- ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED.
  EX) 030- 3pF 330- 33pF 331- 330pF 333- 0.033uF
- ALL RESISTORS ARE IN OHMS 1/4WATTS UNLESS OTHERWISE NOTED.
- THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.
  EX) ▭▭▭ — PRINTING SIDE
- CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

<Note>

NC = No mount of parts.

SD-Z : XY

Location of connected terminal in schematic diagrams.
SD-Z = Schematic diagrams-Z. X = A to H, Y = 1 to 5.

SCHEMATIC DIAGRAMS-5

SPEAKER TERMINAL SECTION

Refer to following table about the parts displayed by mark "★".

	L6600 - 6606	R6600 - 6606 R6610 - 6616	J6851, J3201 J6600, J6604	J6619, 6620 J6625, 6626	J3202
MDD, MDC	NC	NC	YES	YES	NC
MPA	S1.3C	22	NC	NC	YES

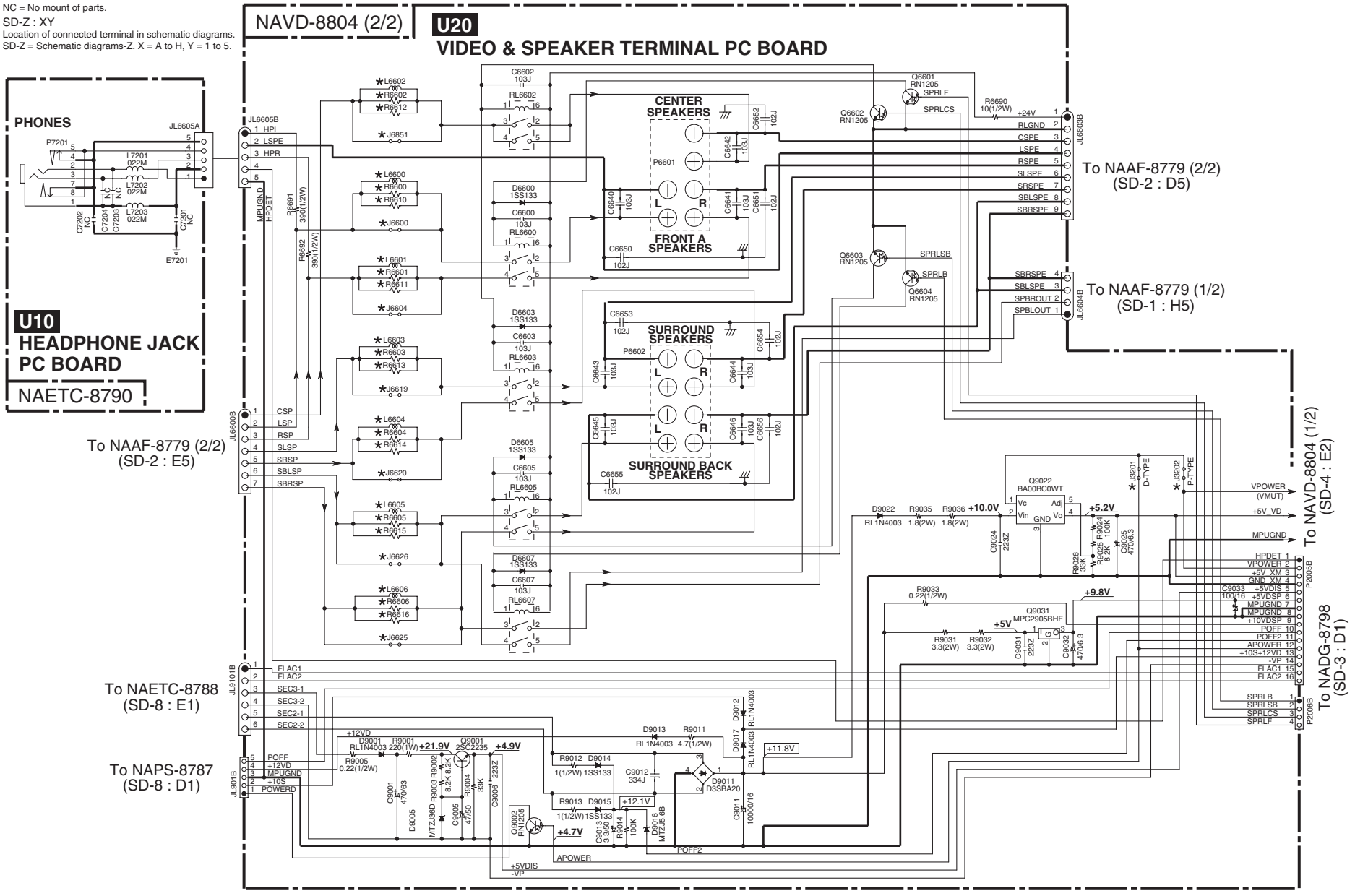
<Note>

NC = No mount of parts.

SD-Z : XY

Location of connected terminal in schematic diagrams.

SD-Z = Schematic diagrams-Z. X = A to H, Y = 1 to 5.



SCHEMATIC DIAGRAMS-6

XM DIGITAL TRANSCEIVER SECTION (MDD, MDC Type only)

<Note>

NC = No mount of parts.

SD-Z : XY

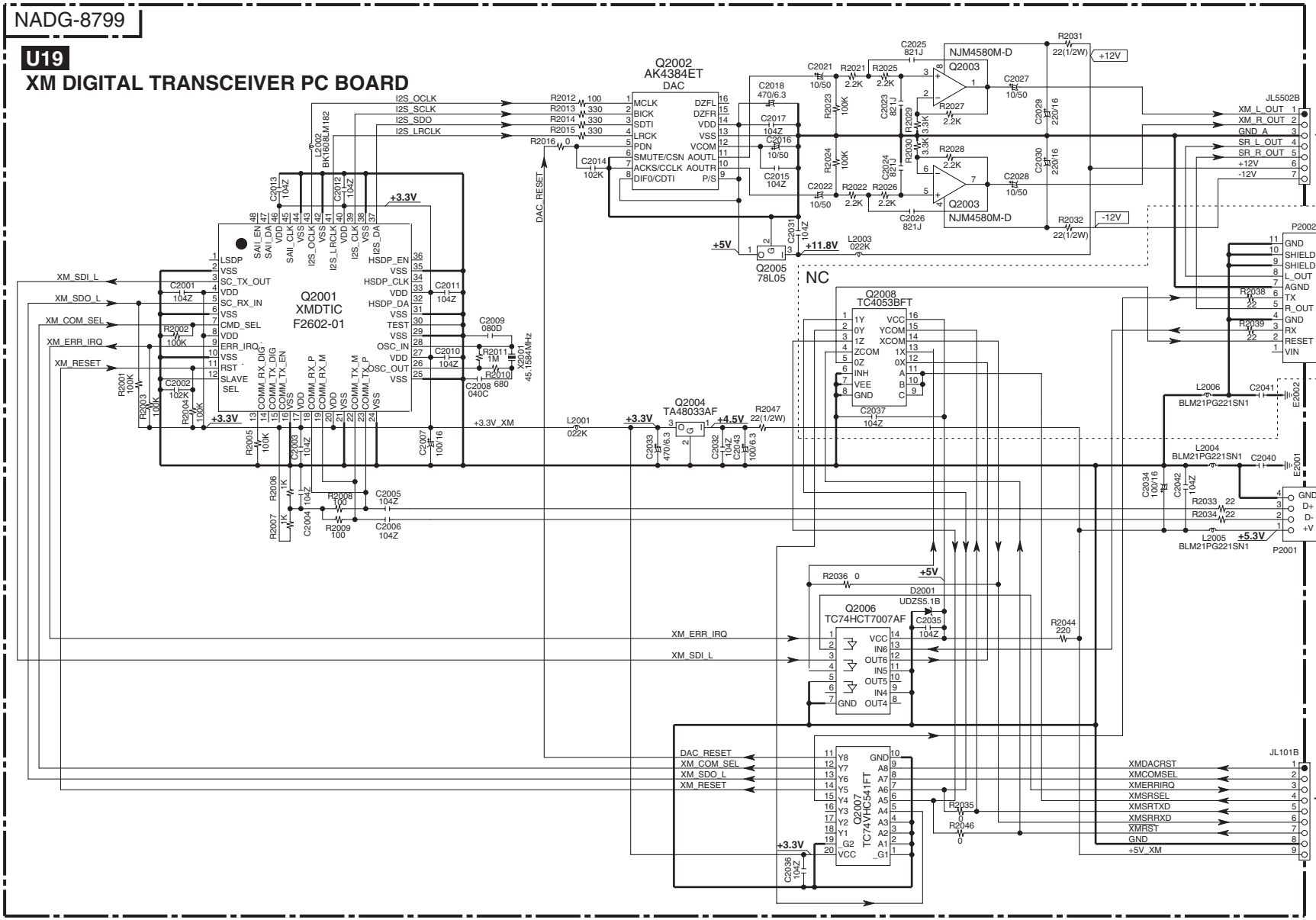
Location of connected terminal in schematic diagrams.

SD-Z = Schematic diagrams-Z. X = A to H, Y = 1 to 5.

NADG-8799

U19

XM DIGITAL TRANSCEIVER PC BOARD



SCHEMATIC DIAGRAMS-7

DISPLAY SECTION

NOTE

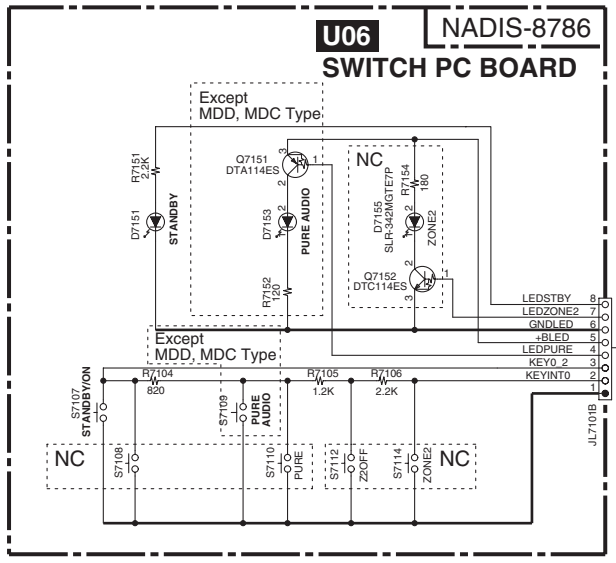
- THE COMPONENTS IDENTIFIED BY MARK ⚠ ARE CRITICAL FOR SAFETY REPLACE ONLY WITH PART NUMBER SPECIFIED.
- VOLTAGE (MEASURED WITH VOLTMETER) ⟨ ⟩ IS DC VOLTAGE.(NO INPUT SIGNAL).
- ALL PNP TRANSISTORS ARE EQUIVALENT TO 2SA1015-GR UNLESS OTHERWISE NOTED.
- ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE NOTED.
- ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
- ELECTROLYTIC CAPACITORS (⊣⊢) ARE IN uF/WV.
- ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED.
  EX) 030- 3pF 330- 33pF 331- 330pF 333- 0.033uF
- ALL RESISTORS ARE IN OHMS 1/4WATTS UNLESS OTHERWISE NOTED.
- THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.
  EX) ⊓⊓⊓ ← PRINTING SIDE
- CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

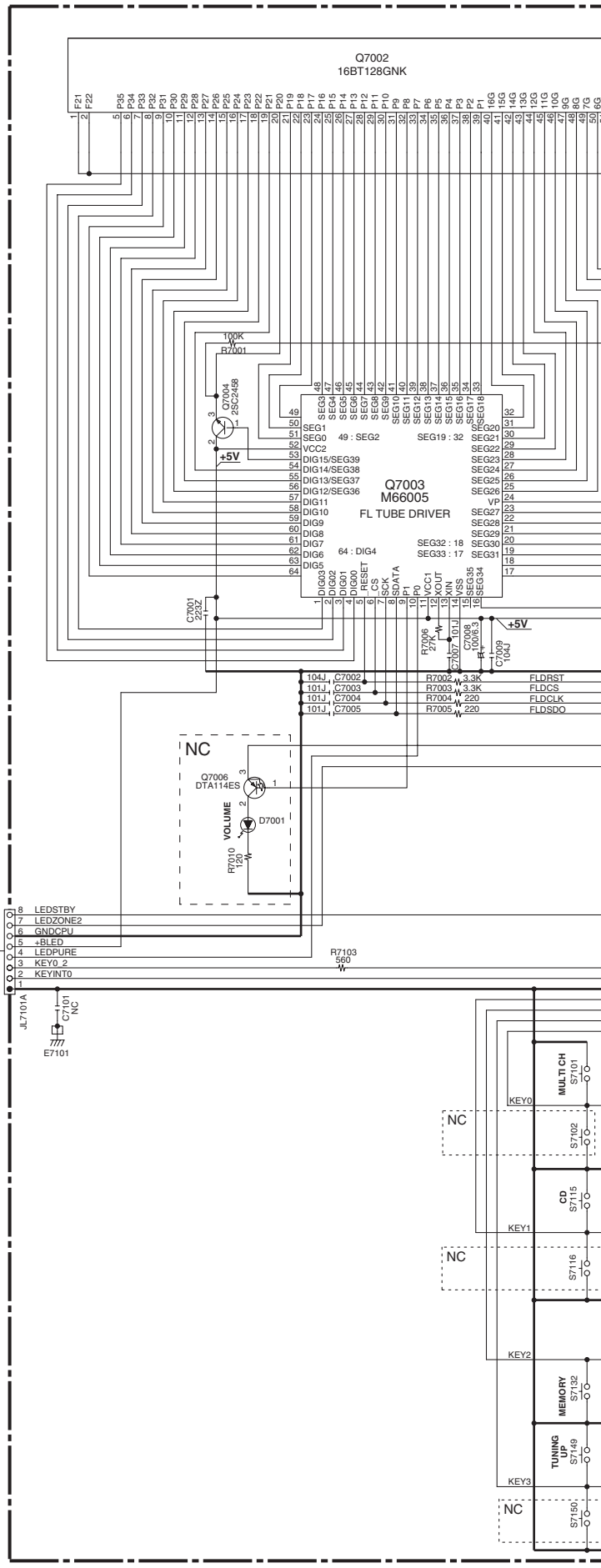
<Note>

NC = No mount of parts.

SD-Z : XY

Location of connected terminal in schematic diagrams.
SD-Z = Schematic diagrams-Z. X = A to H, Y = 1 to 5.





E F G H

U05

NADIS-8785

DISPLAY PC BOARD

P701B

REMIN 26
FLDRST 25
FLDCS 24
FLDCLK 23
FLDSDO 22
KEY0 21
KEY1 20
KEY2 19
KEY3 18
+5.6S 17
KEYINT0 16
FAC1 15
KEYINT1 14
FAC2 13
-VP 12
VOLA 11
+5VDIS 10
VOLB 9
GNDCPU 8
7
V4_R 6
GNDV4 5
V4_L 4
GNDV4V 3
V4V 2
LEDSTBY 1

26P

To NADG-8798
(SD-3 : A1)

V4Y
LEDZONE2
V4C
GNDMIC
-12V
+12V
MICOUT
MICDET
MICMUT
OPTF

C7011 223Z
C7012 223Z
C7010 223Z
R7007 220
R7008 220
C7014 223Z
C7015 100/16
D7002 MTZJ8.2C
C7013 33/50

R7021 10K
R7022 10K
R7023 10K
R7024 10K
S7001
MASTER VOLUME
S7002 NC
C7022 103Z
C7021 103Z

-29.0V

L7032
L7031 022M
L7050
C7016 NC
C7017 NC
C7051 NC
C7052 NC

-29V

+5.6V

R7045 NC
C7046 NC
C7045 NC
U7042 NC
C7047 NC
R7046 NC
R7041 100
C7042 NC
C7041 100/6.3
U7041
C7043 102K
R7042 1K

NC
JL7351A NC

C7305 104J
C7303 104Z
C7304 104Z
E7301

C7301 471J
C7302 471J
R7303 75
R7301 330
R7302 330
P7301

L R VIDEO
VIDEO 3 INPUT

R7101 330
R7102 470
S7104 SPEAKERS B
S7106 SPEAKERS A

TUNER S7117
TAPE S7119
VIDEO 3 S7123
VIDEO 2 S7125
VIDEO 1 S7127
DVD S7129

R7107 330
R7108 470
R7109 560
R7110 820
R7111 1.2K
R7112 2.2K
R7113 3.9K
S7118
S7120
S7122
S7124
S7126
S7128
S7130

R7115 330
R7116 470
R7117 560
R7118 820
R7119 1.2K
R7120 2.2K
R7121 3.9K
R7122 12K

DIGITAL INPUT S7134
DISPLAY S7136
LISTENING MODE> S7138
LISTENING MODE< S7140
STEREO S7142
TONE+ S7144
TONE- S7146
TONE S7148

PRESET UP S7151
ENTER S7153
PRESET DOWN S7155
TUNING DOWN S7157
SETUP S7159
RETURN S7161

R7123 330
R7124 470
R7125 560
R7126 820
R7127 1.2K
R7128 2.2K
R7129 3.9K
R7130 12K
S7152
S7154
S7156
S7158
S7160
S7162
TUNING MODE S7164
DIMMER S7166

SCHEMATIC DIAGRAMS-8

POWER SUPPLY SECTION

NOTE

- THE COMPONENTS IDENTIFIED BY MARK ⚠ ARE CRITICAL FOR SAFETY REPLACE ONLY WITH PART NUMBER SPECIFIED.
- VOLTAGE (MEASURED WITH VOLTMETER) ⟨ ⟩ IS DC VOLTAGE.(NO INPUT SIGNAL).
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- ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE NOTED.
- ALL DIODES ARE EQUIVALENT TO 1SS133 UNLESS OTHERWISE NOTED.
- ELECTROLYTIC CAPACITORS (⊣⊢) ARE IN uF/WV.
- ALL CAPACITORS ARE IN pF/50WV UNLESS OTHERWISE NOTED. EX) 030- 3pF 330- 33pF 331- 330pF 333- 0.033uF
- ALL RESISTORS ARE IN OHMS 1/4WATTS UNLESS OTHERWISE NOTED.
- THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS. EX) ooo PRINTING SIDE
- CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

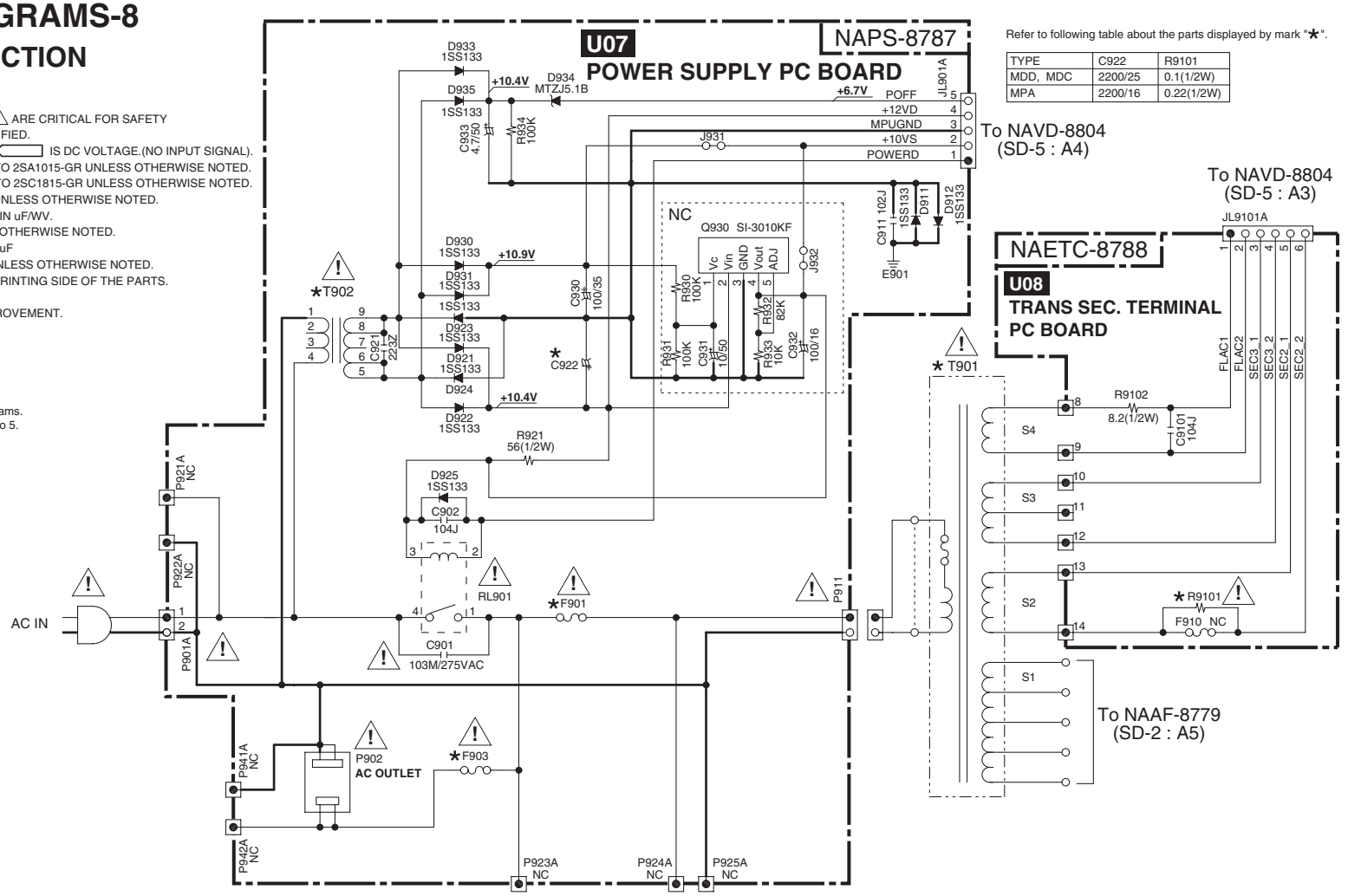
<Note>

NC = No mount of parts.

SD-Z : XY

Location of connected terminal in schematic diagrams.
SD-Z = Schematic diagrams-Z. X = A to H, Y = 1 to 5.

TYPE	AC IN
MDD, MDC	120V, 60Hz
MPA	230-240V, 50Hz



Refer to following table about the parts displayed by mark "★".

TYPE	C922	R9101
MDD, MDC	2200/25	0.1(1/2W)
MPA	2200/16	0.22(1/2W)

Refer to following table about the parts displayed by mark "★".

TYPE	F901	F903	T901	T902
MDD, MDC	8A 125V	5A 125V	NPT-1517D	NPT-1520JQ
MPA	T4AL250V	T2.5AL250V	NPT-1517P	NPT-1519GQ

THIS SYMBOL LOCATED NEAR THE FUSE INDICATES THAT THE FUSE USED IS SLOW OPERATING TYPE FOR CONTINUED PROTECTION AGAINST FIRE HAZARD,REPLACE WITH SAME TYPE FUSE. FOR FUSE RATING REFER TO THE MARKING ADJACENT TO THE SYMBOL.

CE SYMBOLE INDIQUE QUE LE FUSIBLE UTLISE EST E LENT.POUR UNE PROTECTION PERMANENTE,N'UTILISER QUE DES FUSIBLES DE MEME TYPE. CE DARNIER EST INDIQUE LA QU LE PRESENT SYMBOL EST APPOSE.

CAUTION

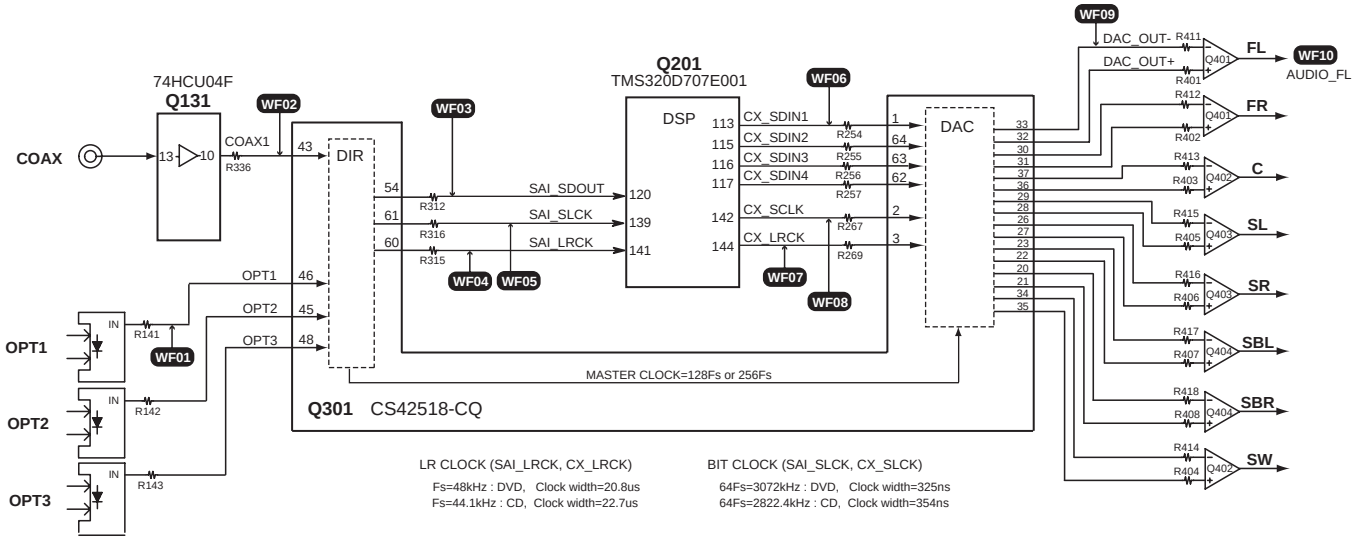
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH FUSE OF SAME TYPE AND RATING INDICATED.

ATTENTION

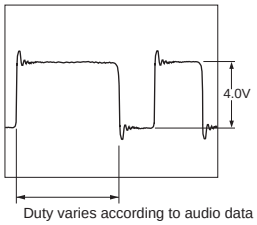
AFIN D'ASSURER UNE PROTECTION PERMANENTE CONTRE LES RISQUES D'INCENDIE, REMPLACER UNIQUEMENT PAR UN FUSIBLE DE MEME TYPE ET CALIBRATION COMME INDIQUE.

SCHEMATIC DIAGRAMS-9
DIGITAL AUDIO WAVE FORM SECTION

NOTE:
1. (WF01) is short for (WaveForm01) .
2. See SD-6(SCHEMATIC DIAGRAM-6) for details

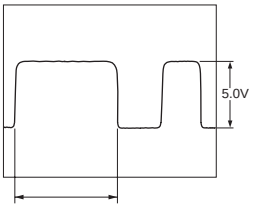


WF01 OPT1



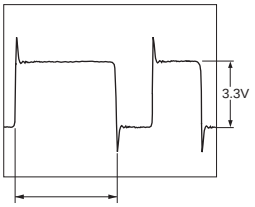
Duty varies according to audio data

WF02 COAX1



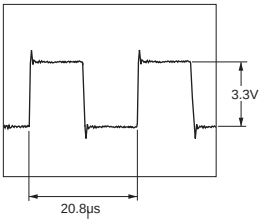
Duty always varies according to audio data

WF03 SAI_SDOUT

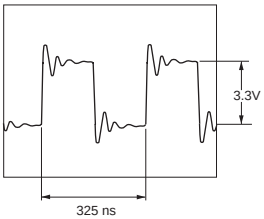


Duty varies according to audio data

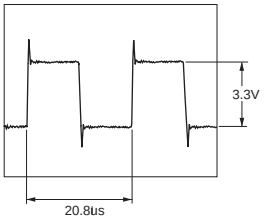
WF04 SAI_LRCK



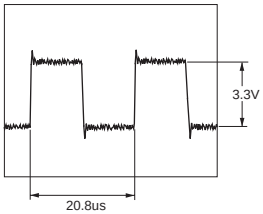
WF05 SAI_SLCK



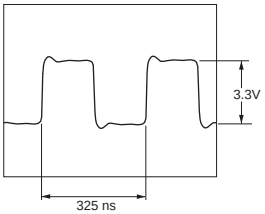
WF06 CX_SDIN1



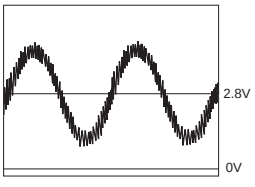
WF07 CX_LRCK



WF08 CX_SCLK

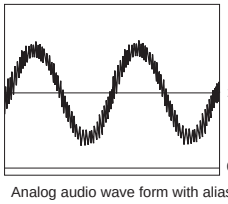


WF09 DAC_OUT-



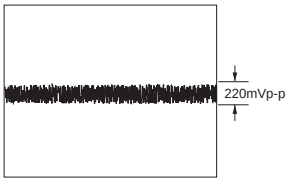
Analog audio wave form with aliasing noise

WF10 AUDIO_FL



Analog audio wave form with aliasing noise

WF10 AUDIO_FL



Aliasing noise in no audio data

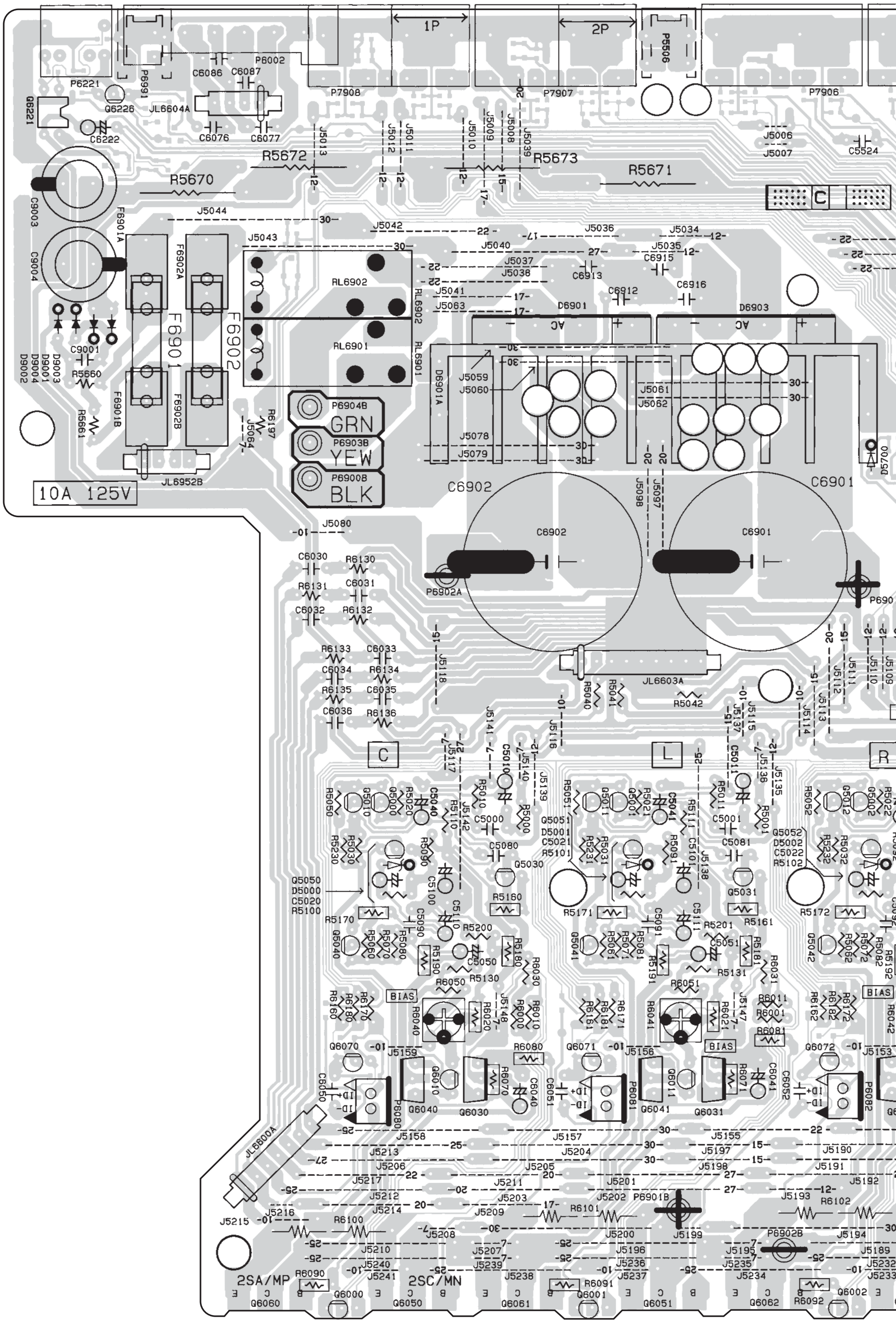
A B C D

PRINTED CIRCUIT BOARD VIEWS-1

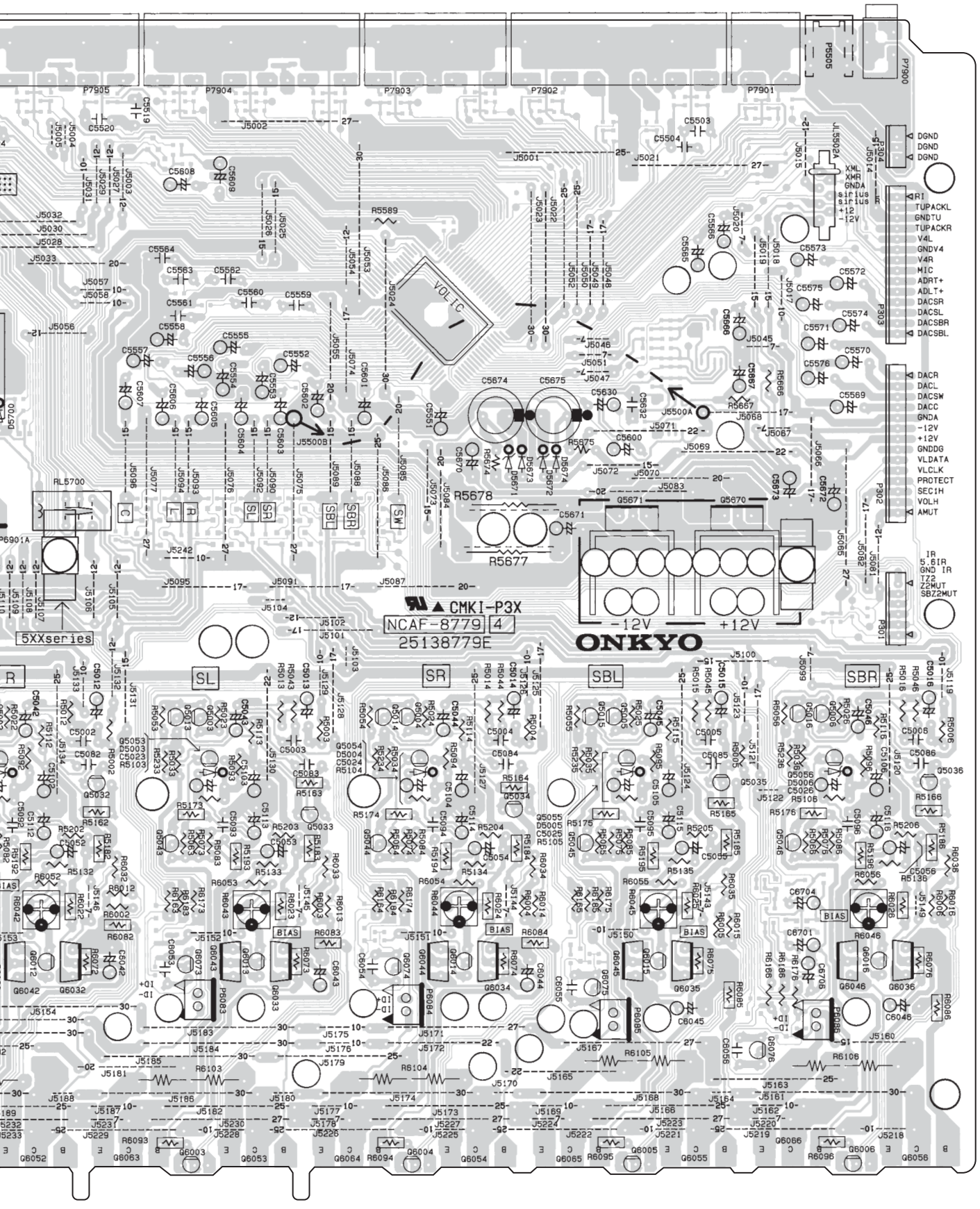
U01 AMPLIFIER PC BOARD (NAAF-8779)

Component side

1
2
3
4
5



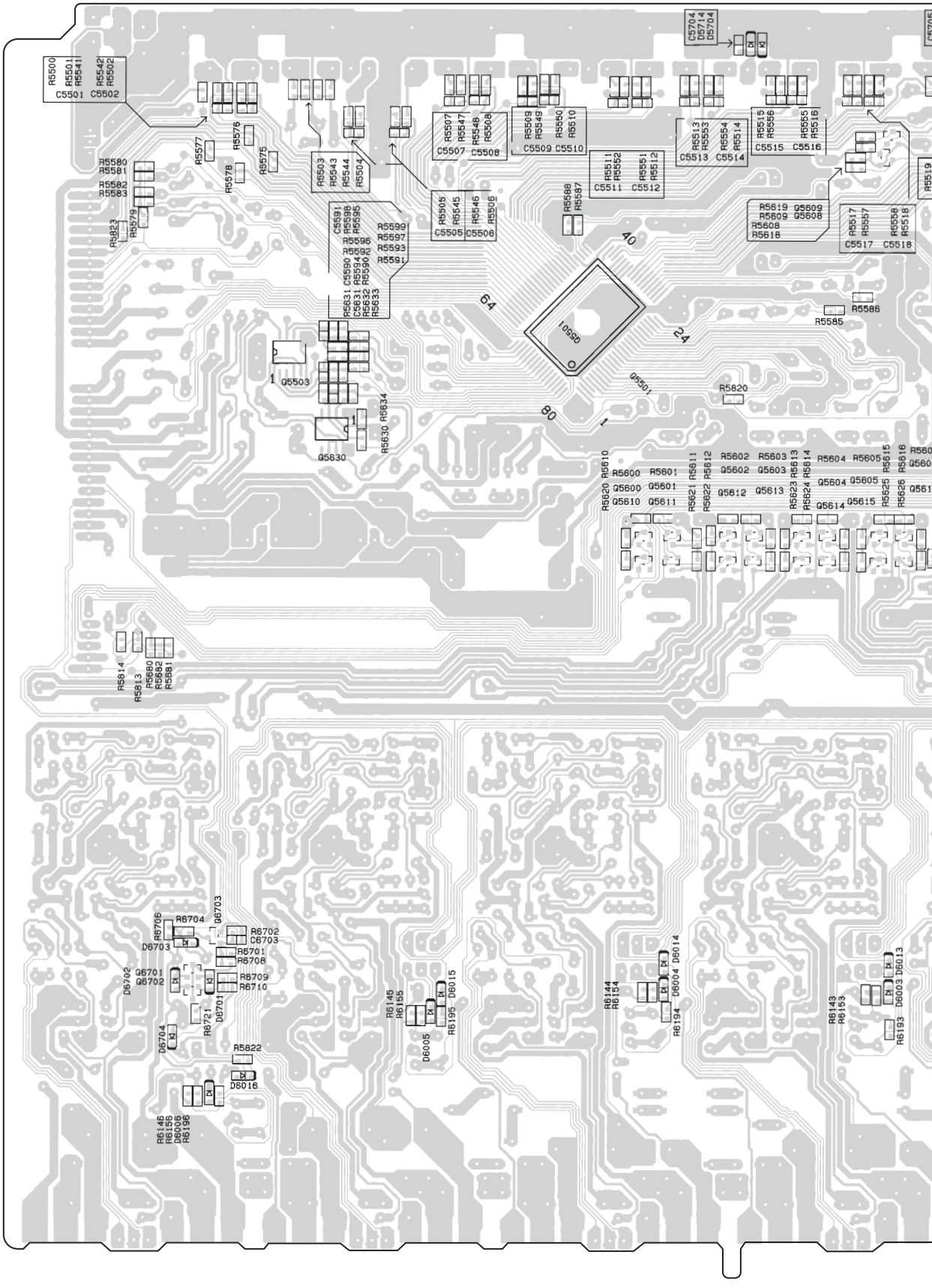
E F G H


P7905
P7904
P7903
P7902
P7901
P7900
P5505
DGND
DGND
DGND
XML
XMR
GNDA
sirius
sirius
+12
-12V
RI
TUPACKL
GNDTU
TUPACKR
V4L
GNDV4
V4R
MIC
ADRT+
ADLT+
DACSR
DACSL
DACSBR
DACSBL
DACR
DACL
DACSW
DACC
GNDA
-12V
+12V
GNDDG
VLDATA
VLCLK
PROTECT
SEC1H
VOLH
AMUT
IR
5.6IR
GND IR
TZ2
Z2MUT
SBZ2MUT
VOL IC
RL5700
P6901A
5XXseries
CMKI-P3X
NCAF-8779 4
25138779E
ONKYO
-12V
+12V
R5678
R5677
R
SL
SR
SBL
SBR
BIAS

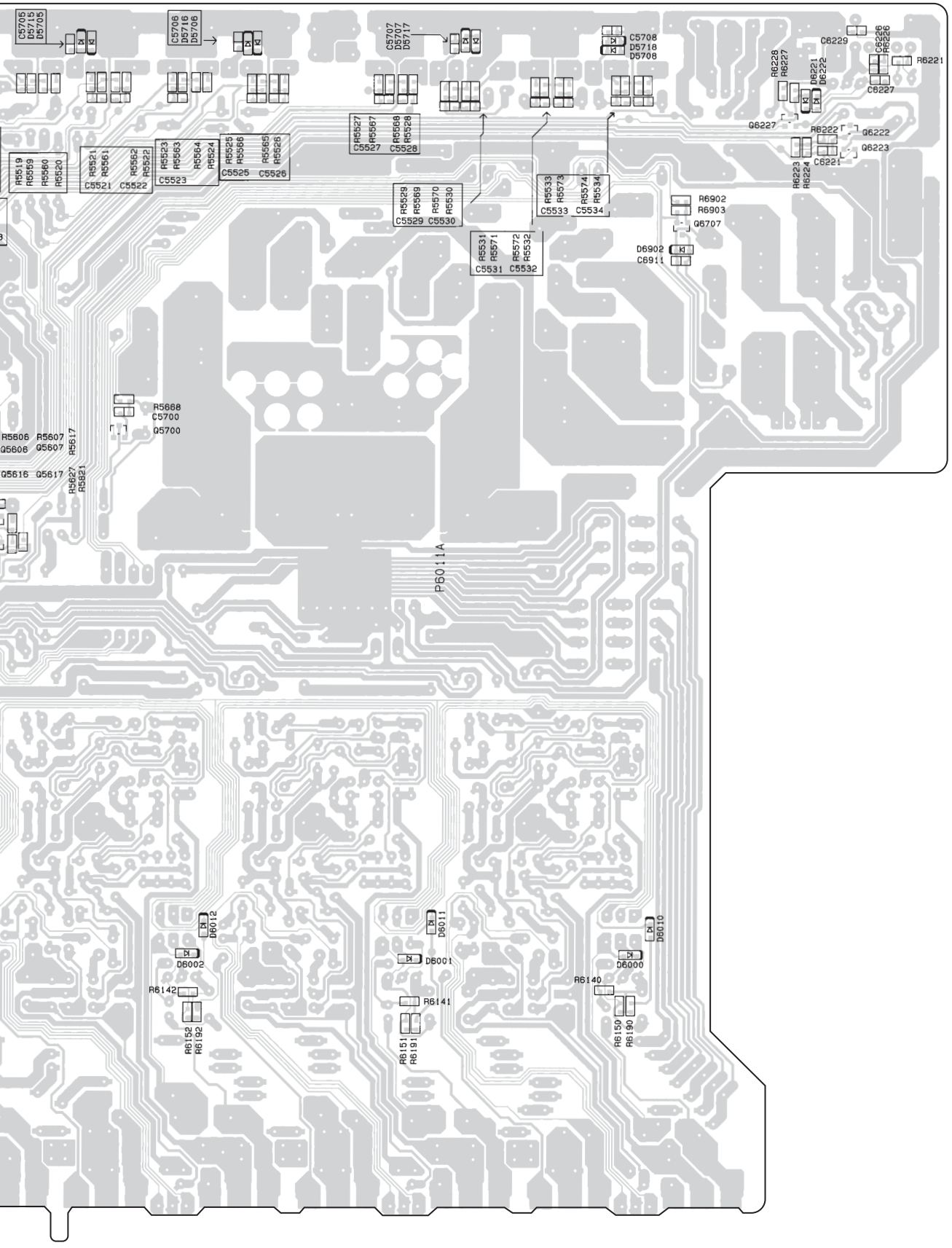
PRINTED CIRCUIT BOARD VIEWS-2

U01 AMPLIFIER PC BOARD (NAAF-8779)

Soldering side



E F G H


C5706
D5715
D5705
C5706
D5716
D5706
C5707
D5717
C5708
D5718
D5708
C6229
R6226
R6225
R6221
R6228
R6227
D6221
D6222
C6227
Q6227
R6222
Q6222
Q6223
C6221
R6223
R6224
R5519
R6559
R5560
R5520
R5521
R5561
C5521
R5562
R5522
C5522
R5523
R5563
C5523
R5564
R5524
R5525
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R5565
R5526
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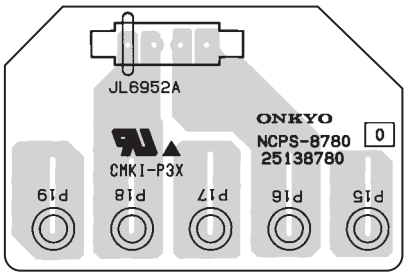
R5527
R5567
C5527
R5568
R5528
C5528
R5529
R5569
C5529
R5570
R5530
C5530
R5533
R5573
C5533
R5574
R5534
C5534
R6902
R6903
Q6707
D6902
C6911
R5531
R5571
C5531
R5572
R5532
C5532
R5668
C5700
Q5700
R5606
Q5606
R5607
Q5607
R5617
Q5616
Q5617
R5627
R5621
P6011A
D6012
D6002
R6142
R6152
R6192
D6011
D6001
R6141
R6151
R6191
D6010
D6000
R6140
R6150
R6190

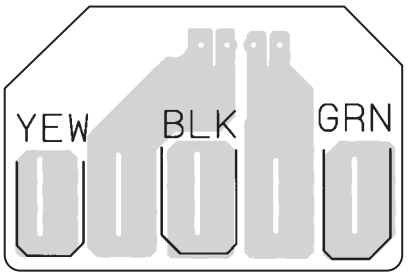
PRINTED CIRCUIT BOARD VIEWS-3

U02 TRANS SEC. TERMINAL PC BOARD (NAPS-8780)

Component side

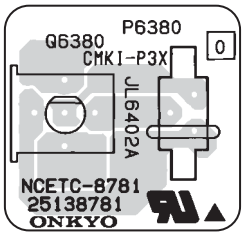


Soldering side



U03 THERMAL SENSOR PC BOARD (NAETC-8781)

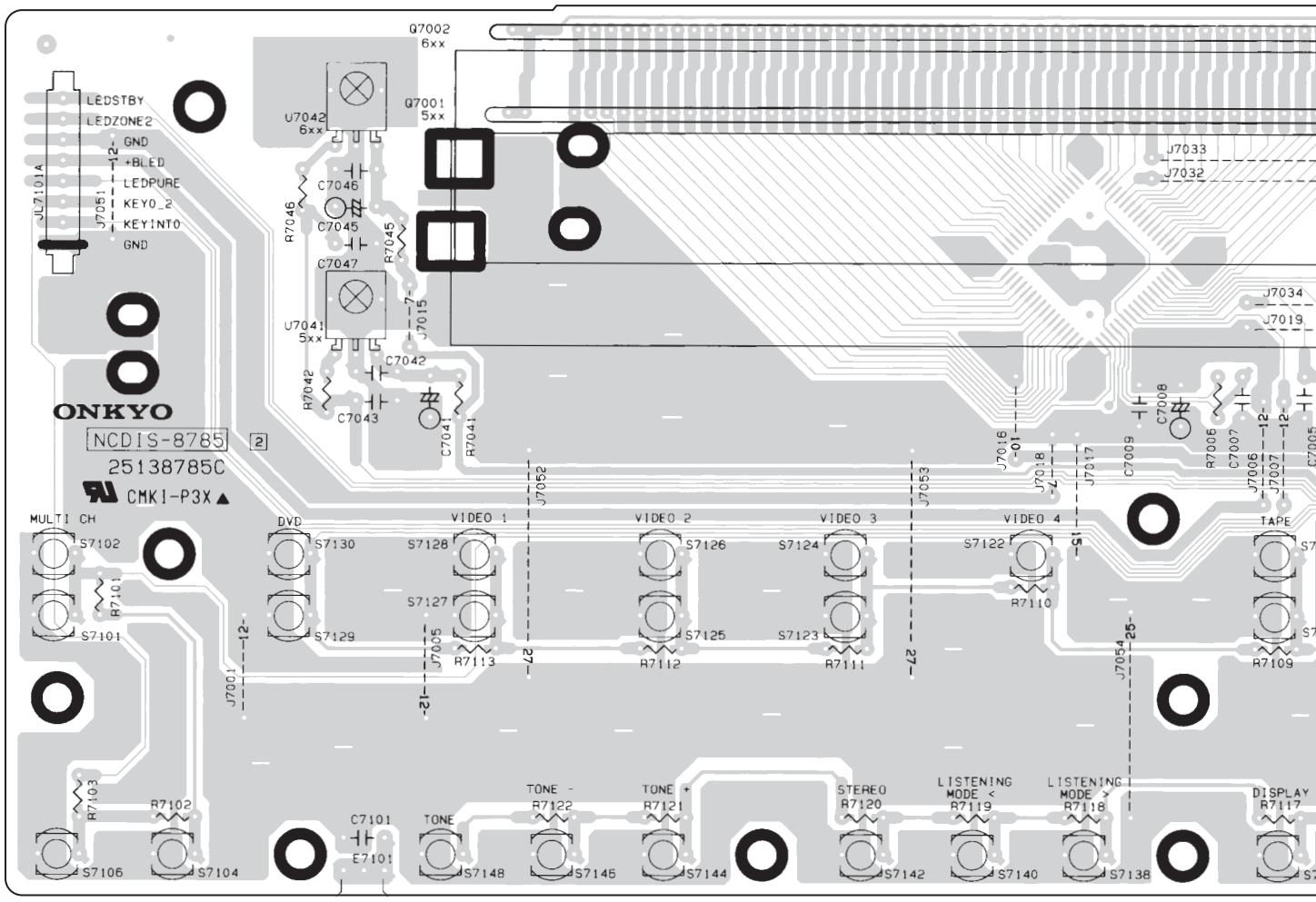
Component side



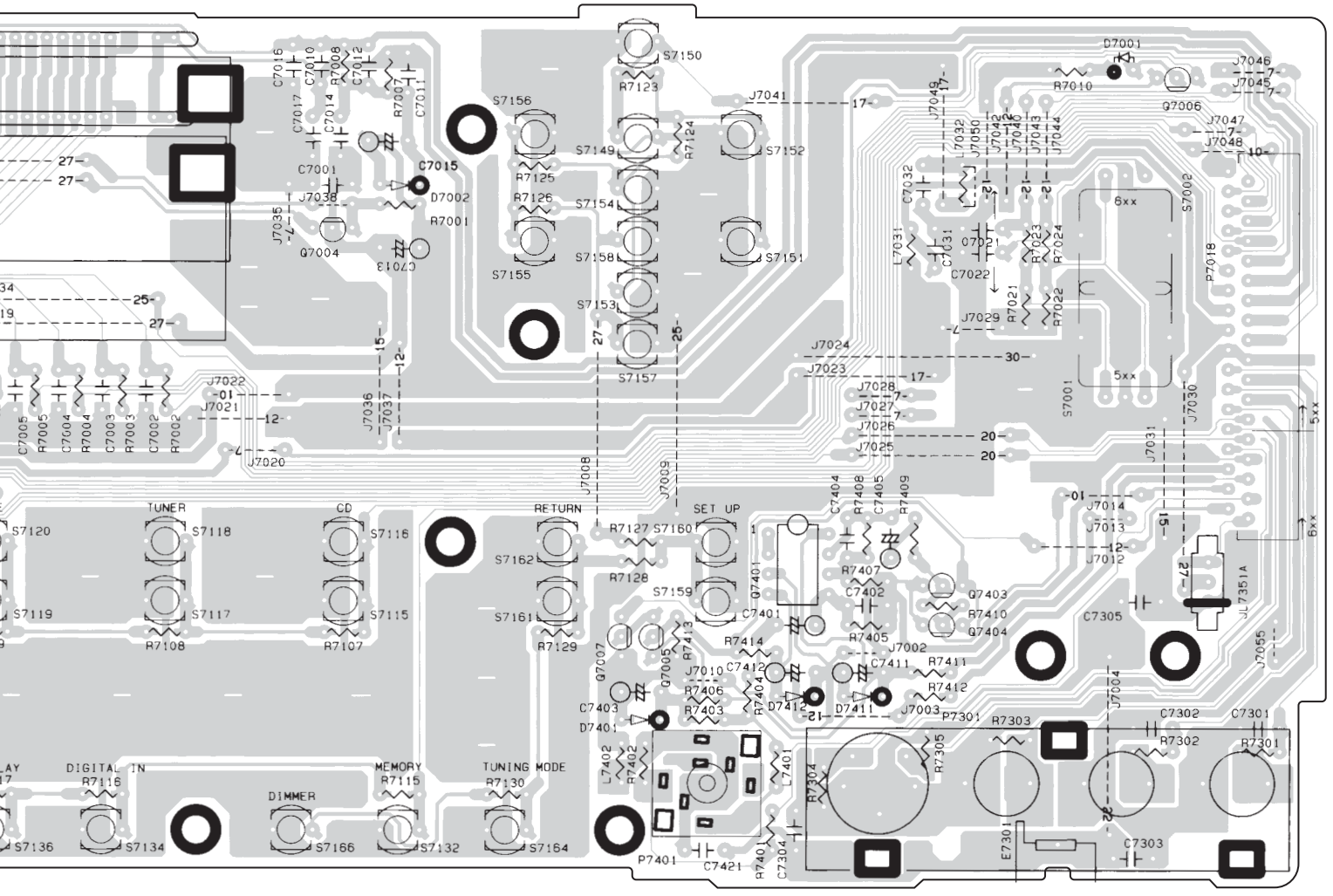
PRINTED CIRCUIT BOARD VIEWS-4

U05 DISPLAY PC BOARD (NADIS-8785)

Component side



E F G H


TUNER
CD
RETURN
SET UP
DIGITAL IN
DIMMER
MEMORY
TUNING MODE
S7120
S7118
S7116
S7119
S7117
S7115
S7162
S7161
S7159
S7160
S7150
S7156
S7149
S7154
S7158
S7153
S7155
S7152
S7151
S7157
S7136
S7134
S7166
S7132
S7164
R7108
R7107
R7129
R7128
R7127
R7123
R7124
R7125
R7126
R7116
R7115
R7130
C7015
D7002
R7001
Q7004
D7001
R7010
Q7006
P7301
P7401
C7421
C7303
C7302
C7301
R7303
R7302
R7301
R7305
R7304
E7301
C7305
JL7351A
Q7403
Q7404
R7410
C7411
R7411
R7412
D7411
D7412
C7412
R7414
R7406
R7403
C7403
D7401
Q7007
Q7005
R7413
C7401
C7402
R7407
C7404
R7408
C7405
R7409
J7002
J7003
J7004
J7055
J7014
J7013
J7012
J7041
J7042
J7043
J7044
J7045
J7046
J7047
J7048
J7049
J7050
J7032
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J7025
J7024
J7023
J7022
J7021
J7020
J7036
J7037
J7035
J7038
J7008
J7009
J7030
J7031
S7002
S7001
P7018
L7031
C7031
C7032
C7021
C7022
R7023
R7024
R7021
R7022
6xx
5xx
C7016
C7010
R7008
C7012
C7017
C7014
R7007
C7011
C7013
C7001
C7005
R7005
C7004
R7004
C7003
R7003
C7002
R7002
L7402
R7402
L7401
C7304
R7401
Q7401
C7407
R7405
C7408
R7404
R7406
C7409
R7407
C7410
R7408
C7411
R7409
C7412
R7410
C7413
R7411
C7414
R7412
C7415
R7413
C7416
R7414
C7417
R7415
C7418
R7416
C7419
R7417
C7420
R7418
C7421
R7419
C7422
R7420
C7423
R7421
C7424
R7422
C7425
R7423
C7426
R7424
C7427
R7425
C7428

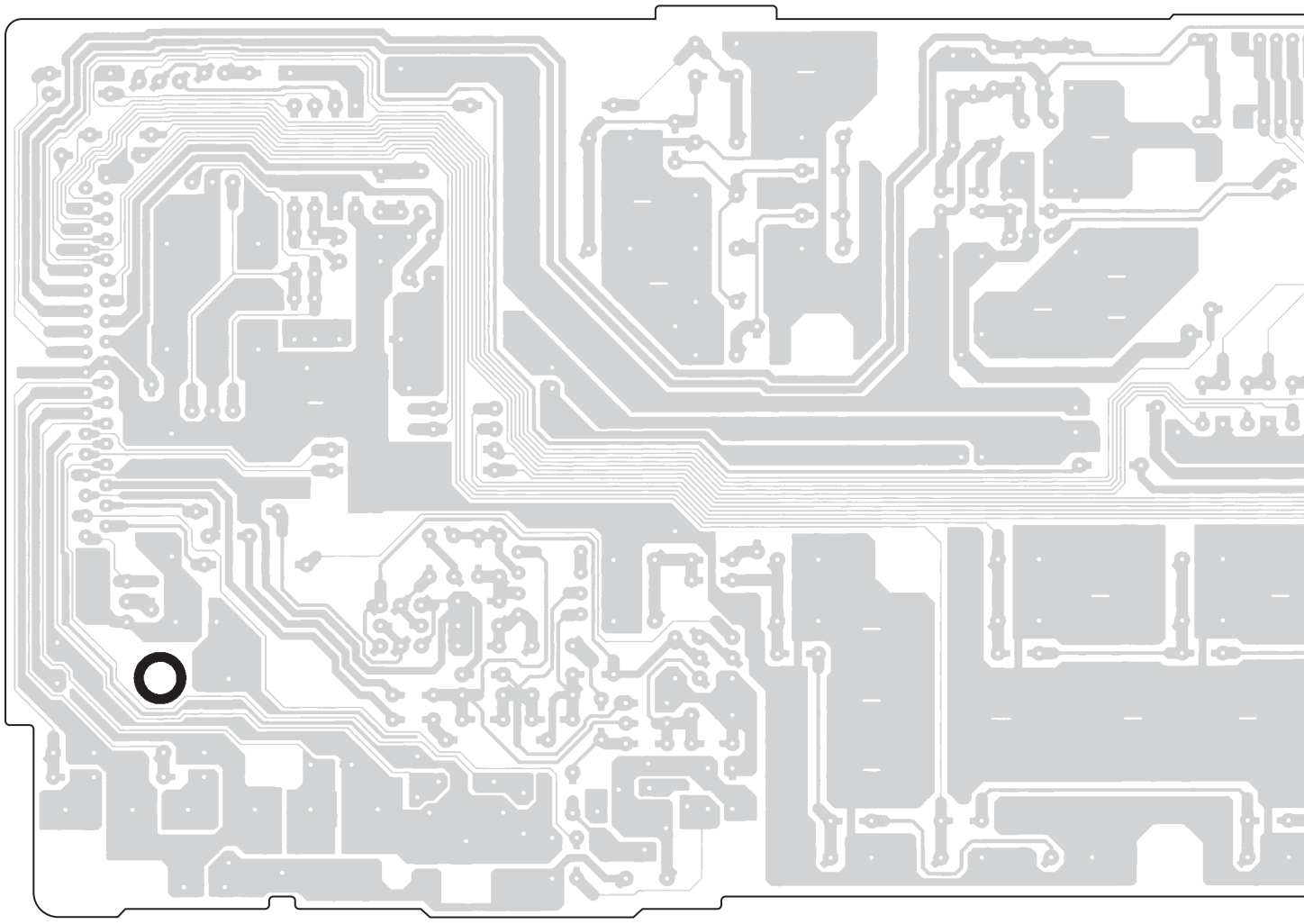
A B C D

1 2 3 4 5

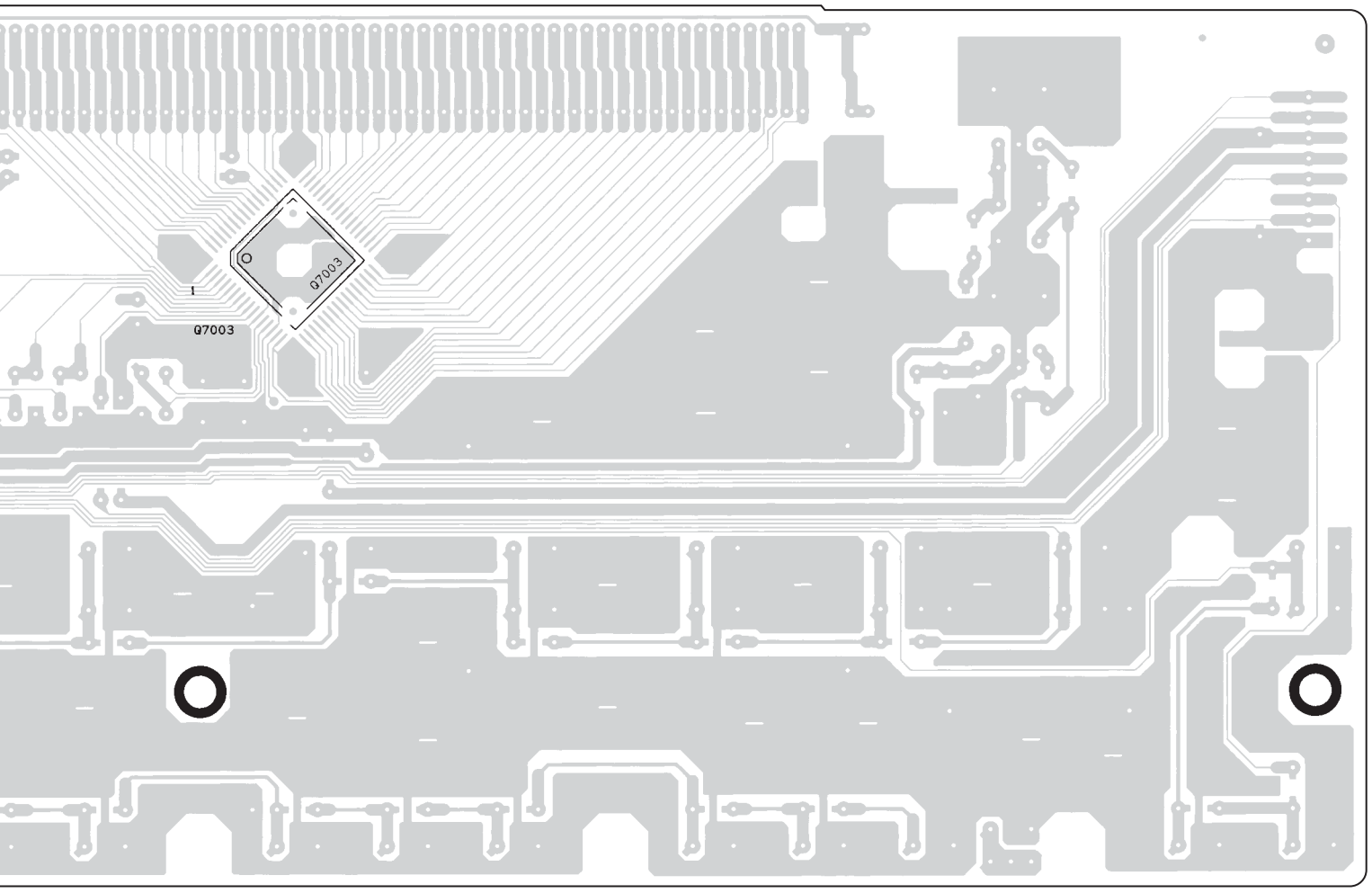
PRINTED CIRCUIT BOARD VIEWS-5

U05 DISPLAY PC BOARD (NADIS-8785)

Soldering side



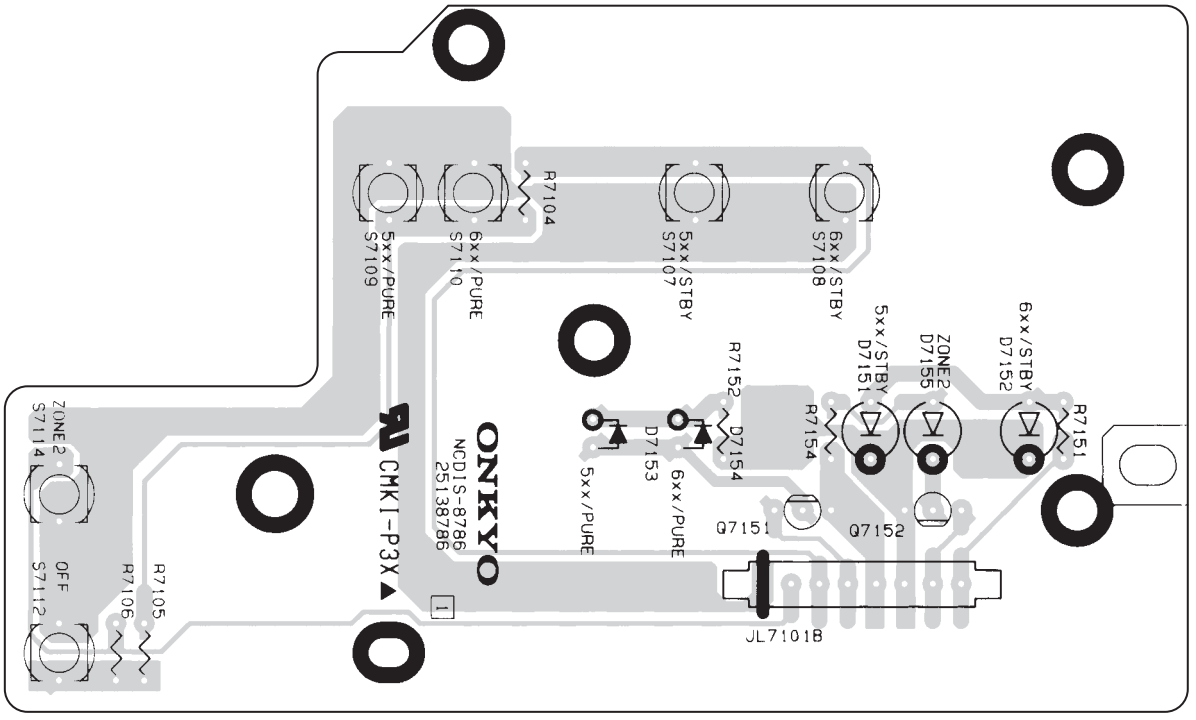
E F G H



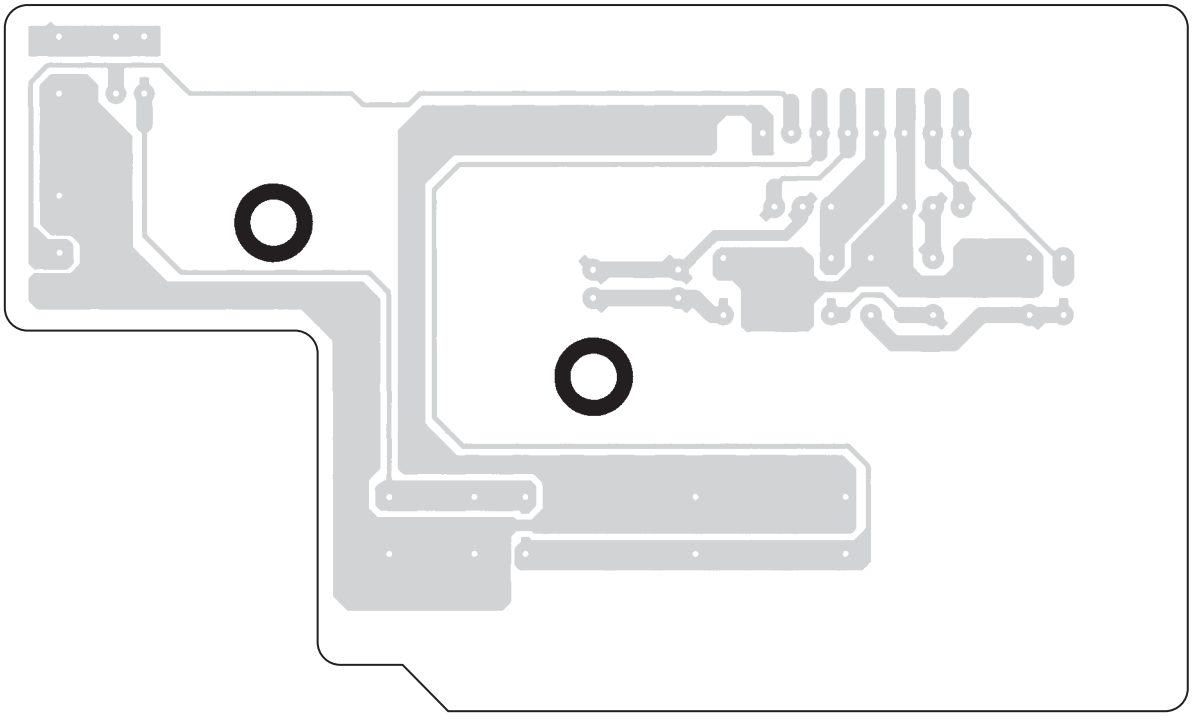
PRINTED CIRCUIT BOARD VIEWS-6

U06 SWITCH PC BOARD (NADIS-8786)

Component side



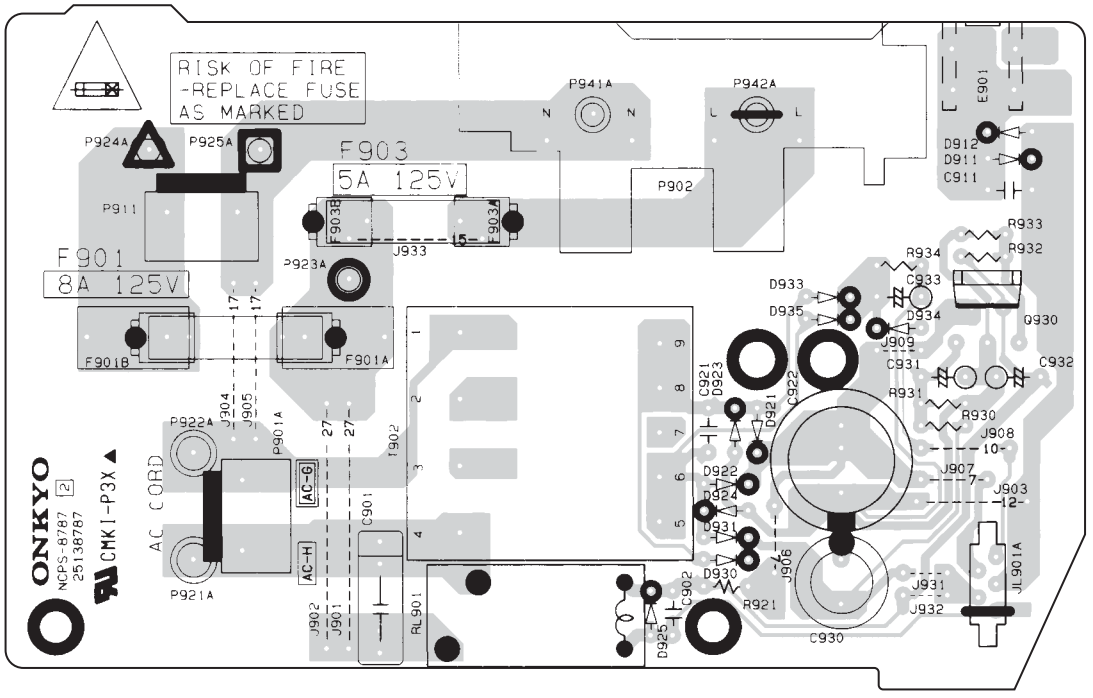
Soldering side



PRINTED CIRCUIT BOARD VIEWS-7

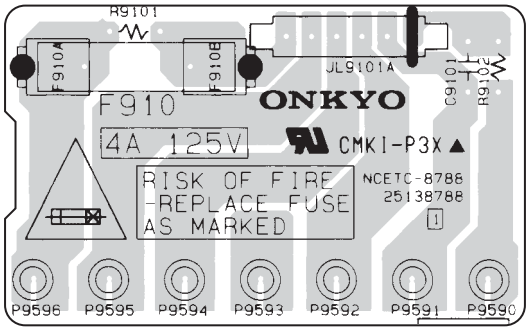
U07 POWER SUPPLY PC BOARD (NAPS-8787)

Component side

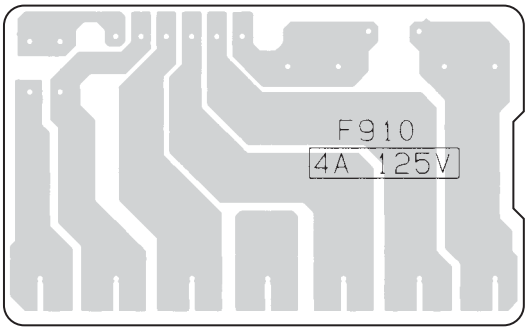


U08 TRANS SEC. TERMINAL PC BOARD (NAETC-8788)

Component side

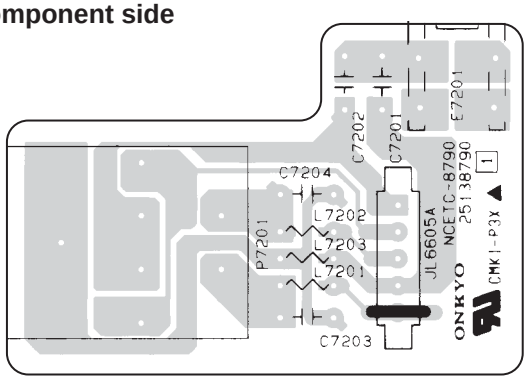


Soldering side



U10 HEADPHONE JACK PC BOARD (NAETC-8790)

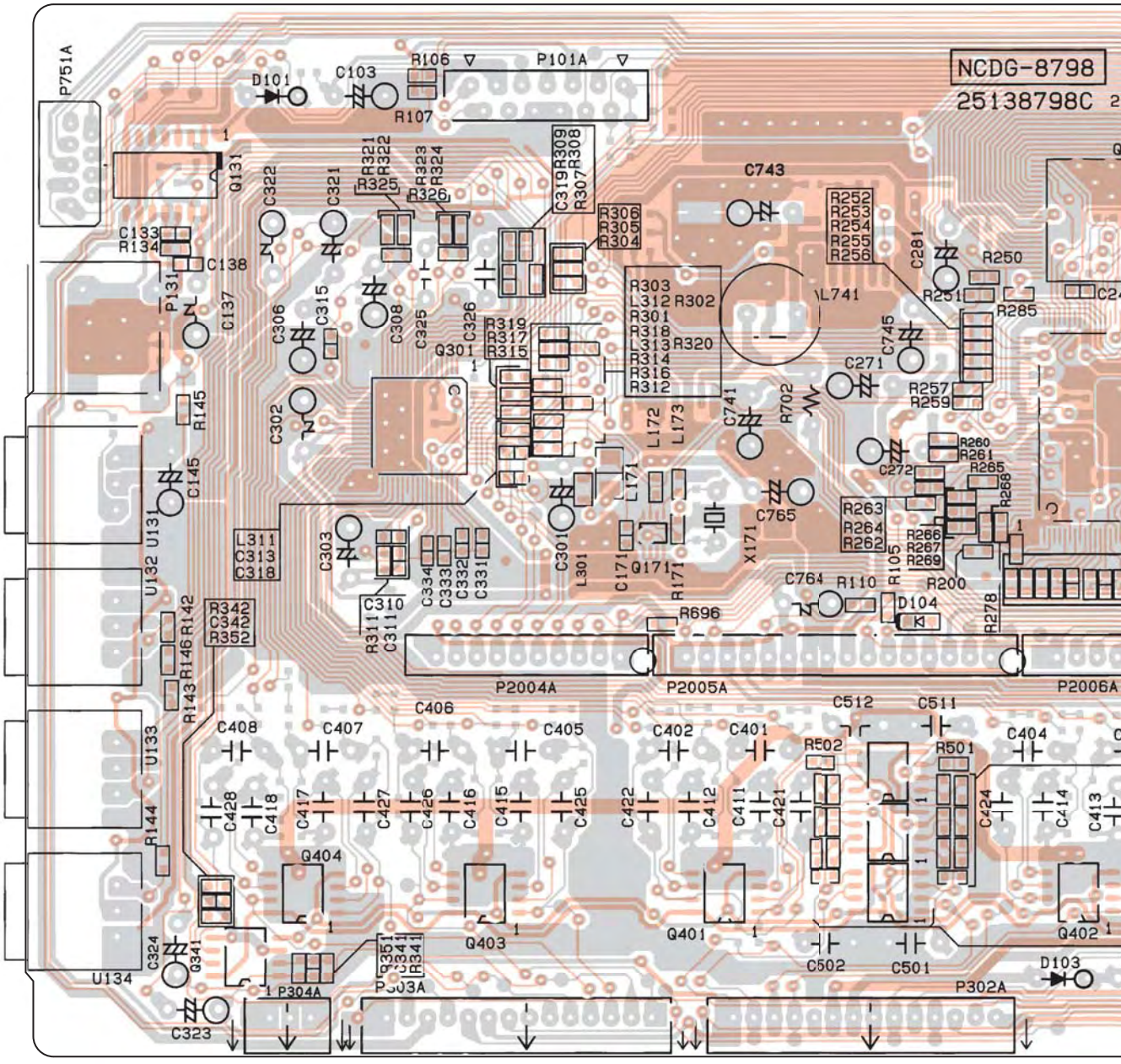
Component side



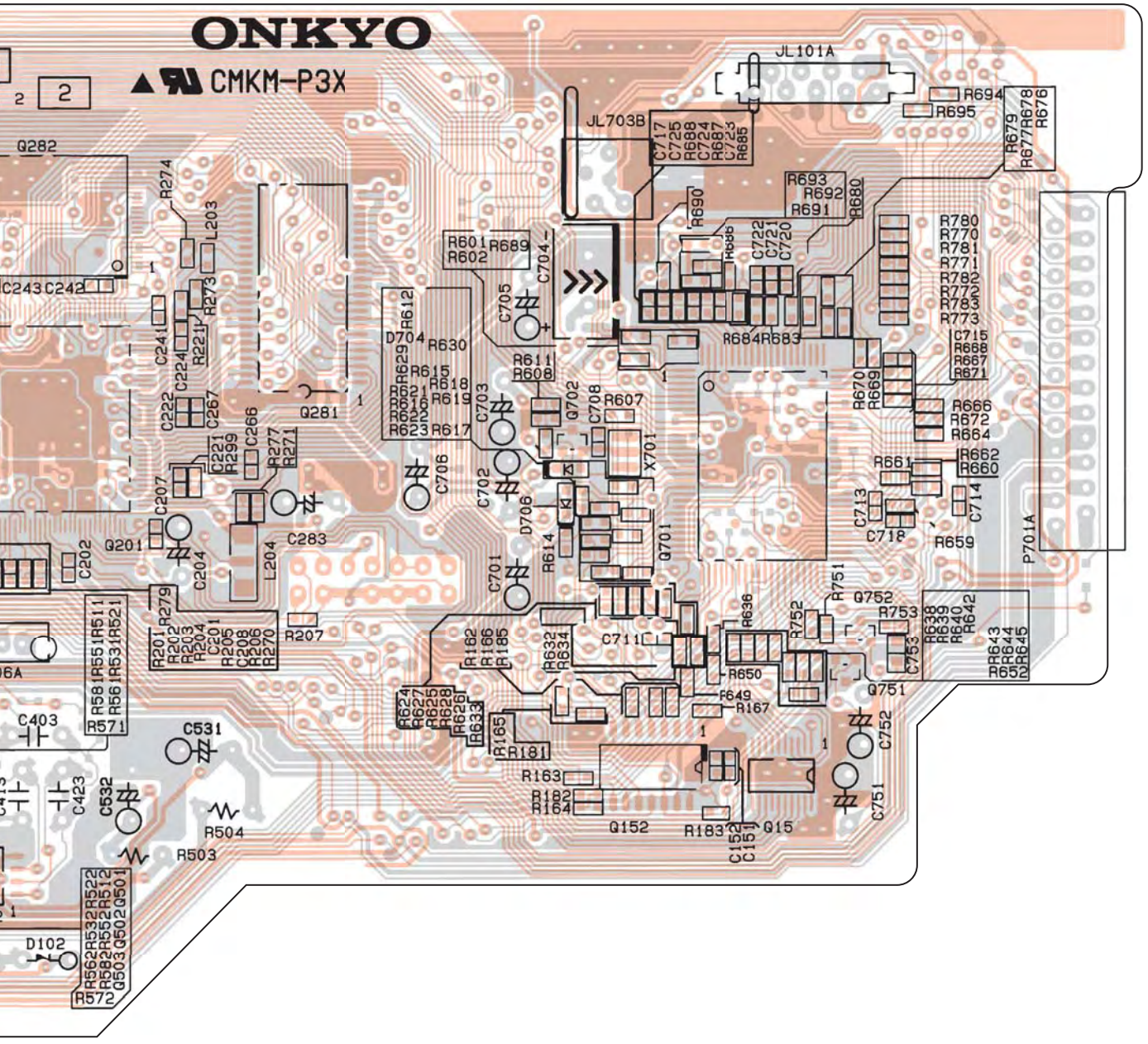
PRINTED CIRCUIT BOARD VIEWS-8

U18 DSP & MICROPROCESSOR PC BOARD (NADG-8798)

Side-A



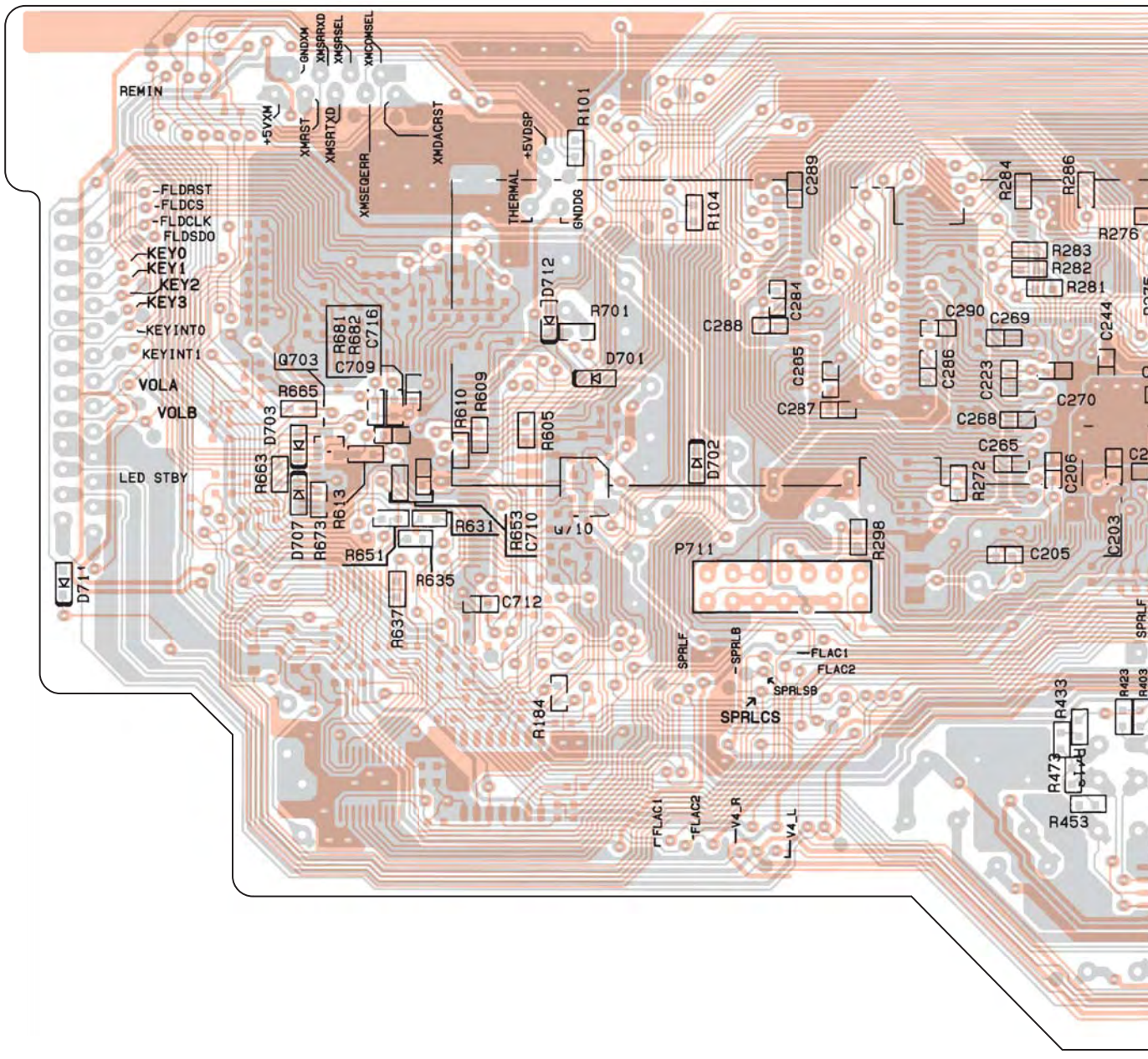
E F G H


ONKYO
CMKM-P3X
JL101A
JL703B
P701A
Q282
Q281
Q201
Q152
Q15
Q751
Q752
D102
D704
X701
C531
C532
R504
R503
R572
R571

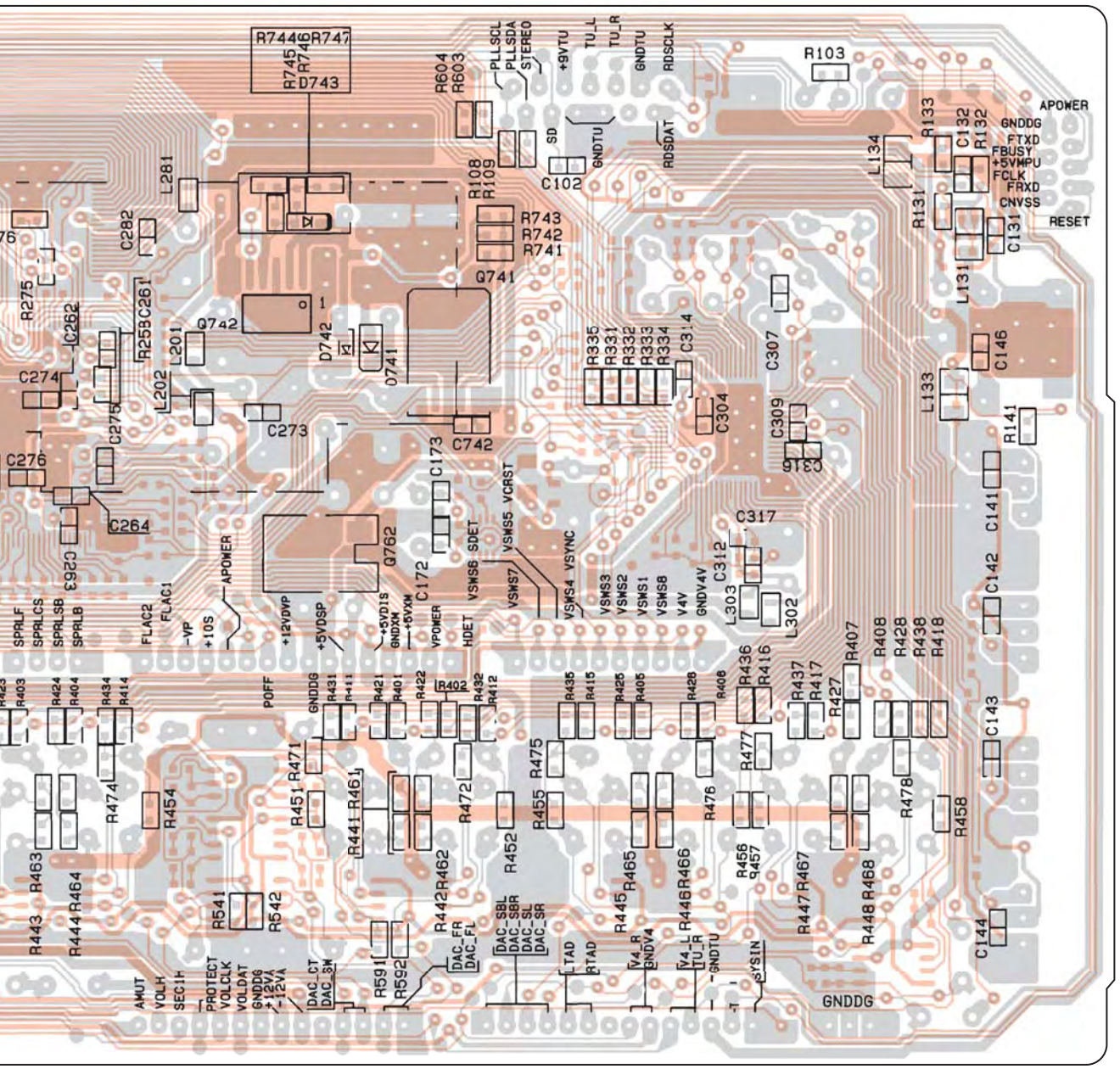
PRINTED CIRCUIT BOARD VIEWS-9

U18 DSP & MICROPROCESSOR PC BOARD (NADG-8798)

Side-B



E F G H

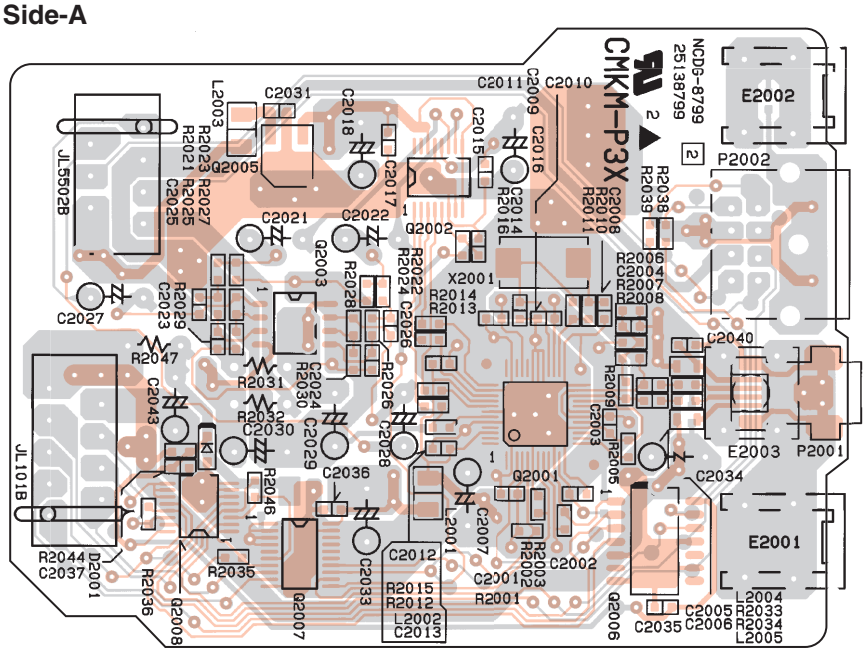

R7446 R7447
R7445 R7446
D743
R604 R603
PLLSCL
PLLSDA
STEREO
+9VTU
TU_L
TU_R
GNDTU
RDSCLK
RDSDAT
SD
C102
R108 R109
R743 R742 R741
Q741
R103
APOWER
GNDDG
FTXD
FBUSY
+5VMPU
FCLK
FRXD
CNVSS
RESET
L134
R133
C132
R132
R131
C131
L131
C146
L133
R141
C141
C142
C143
C144
L281
C282
R275
C262
R258
C261
L201
Q742
D742
Q741
C274
L202
C275
C273
C742
C276
C264
C173
C307
C309
C304
C314
R335
R331
R332
R333
R334
C317
C312
L303
L302
R407
R408
R428
R438
R418
R436
R416
R437
R417
R427
R477
R478
R458
R456
R457
R476
R475
R455
R452
R472
R471
R451
R461
R441
R462
R442
R454
R474
R463
R464
R443
R444
R541
R542
R591
R592
R471
R431
R411
R421
R401
R422
R402
R432
R412
R435
R415
R425
R405
R428
R408
R465
R445
R466
R446
R467
R447
R468
R448
SPRLF
SPRLCS
SPRLSB
SPRLB
FLAC2
FLAC1
-VP
+10S
APOWER
+12VDVP
+5VDSP
+5VDIS
GNDXM
+5VXM
VPOWER
HDET
VSMS6
SDET
VSMS7
VSMS5
VCRST
VSMS4
VSYNC
VSMS3
VSMS2
VSMS1
VSMS8
V4V
GNDV4V
POFF
GNDDG
PROTECT
VOLCLK
VOLDAT
GNDD6
+12VA
-12VA
DAC_CT
DAC_SW
AMUT
VOLH
SEC1H
DAC_FR
DAC_FL
DAC_SBL
DAC_SBR
DAC_SL
DAC_SR
LTAD
RTAD
V4_R
GNDV4
V4_L
TU_R
GNDTU
SYSIN
GNDDG

PRINTED CIRCUIT BOARD VIEWS-10

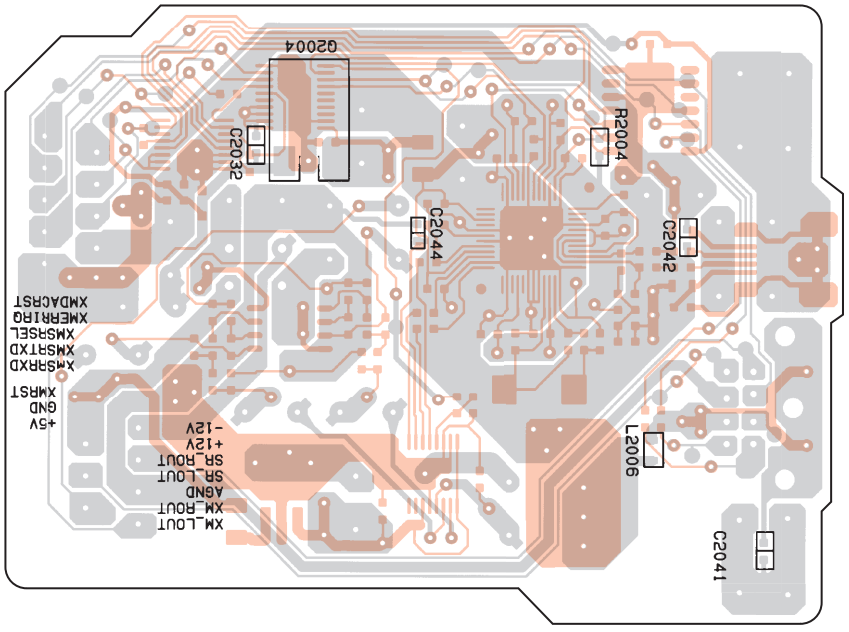
U19 XM DIGITAL TRANSCEIVER PC BOARD (NADG-8799)

<Notes>
MDD. MDC Type Only

Side-A



Side-B



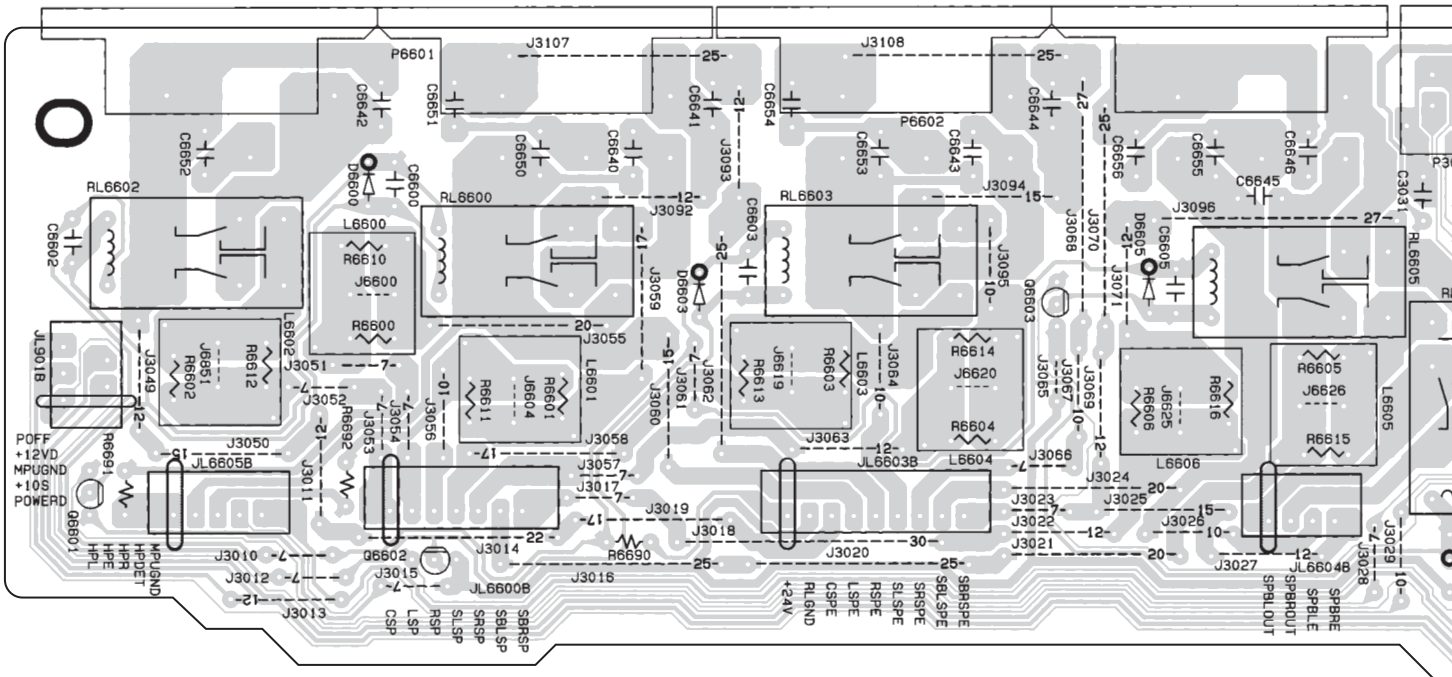
A B C D

1 2 3 4 5

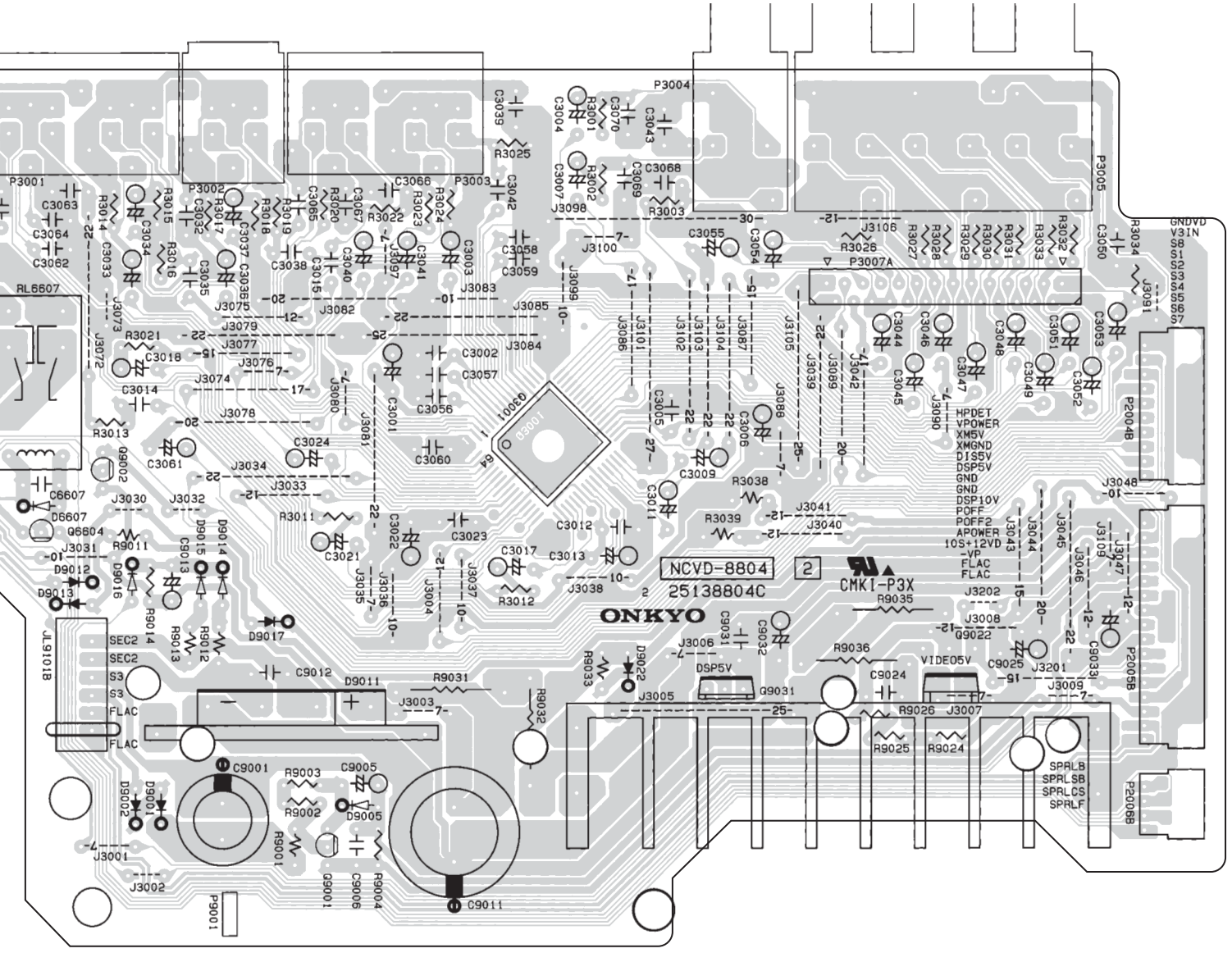
PRINTED CIRCUIT BOARD VIEWS-11

U20 VIDEO & SPEAKER TERMINAL PC BOARD (NAVD-8804)

Component side



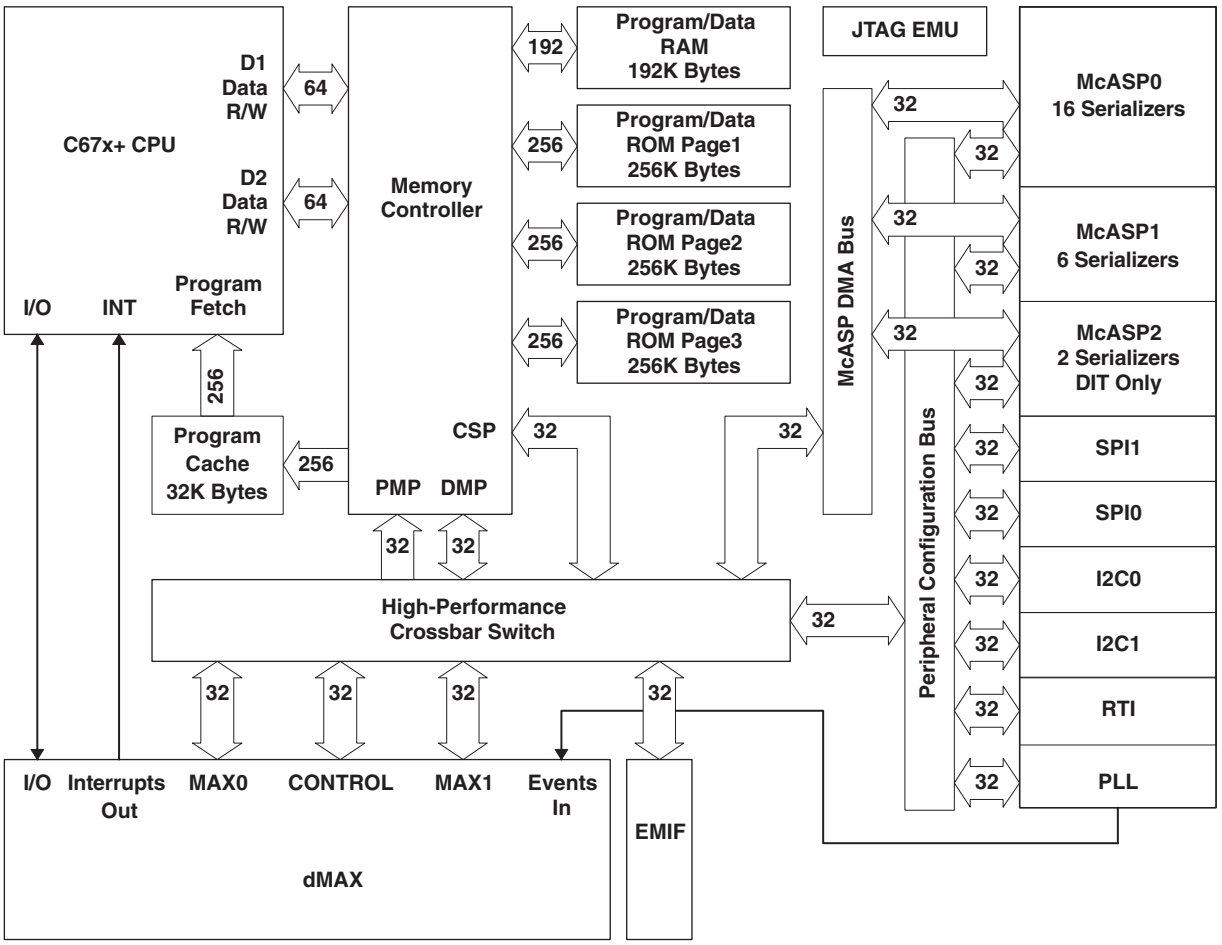
E F G H


NCVD-8804
2
25138804C
ONKYO
CMKI-P3X
P3001
P3002
P3003
P3004
P3005
P3007A
RL6607
HPDET
VPOWER
XM5V
XMGND
DIS5V
DSP5V
GND
GND
DSP10V
POFF
POFF2
APOWER
10S+12VD
VP
FLAC
FLAC
SEC2
SEC2
S3
S3
FLAC
FLAC
DSP5V
VIDE05V
SPRLB
SPRLSB
SPRLCS
SPRLF
GNDVD
V3IN
S8
S7
S6
S5
S4
S3
S2
S1

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS-1

Q201 : D707E001RFP250 (32 bit Floating-Point Digital Signal Processor)-1/7

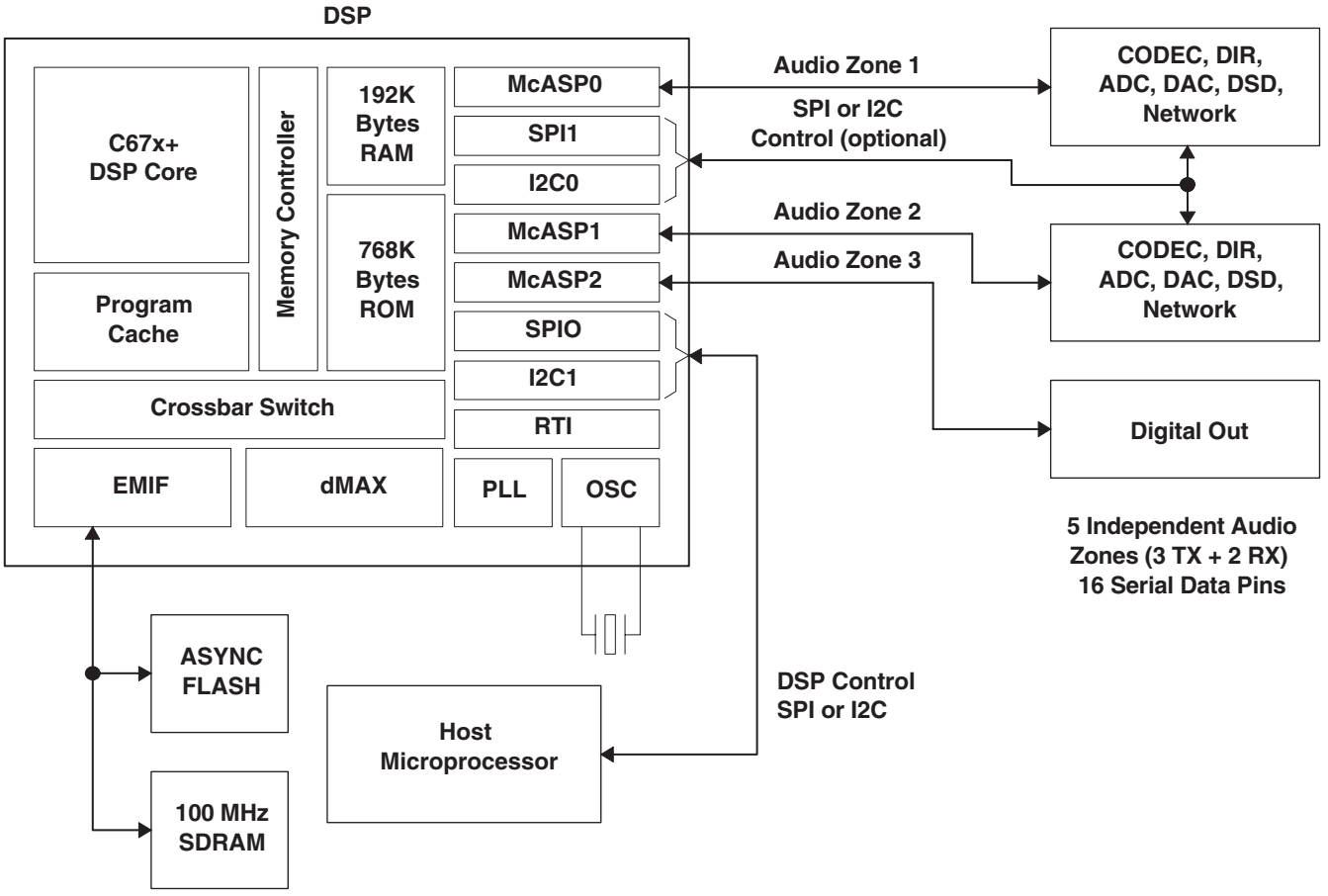
BLOCK DIAGRAM



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS-2

Q201 : D707E001RFP250 (32 bit Floating-Point Digital Signal Processor)-2/7

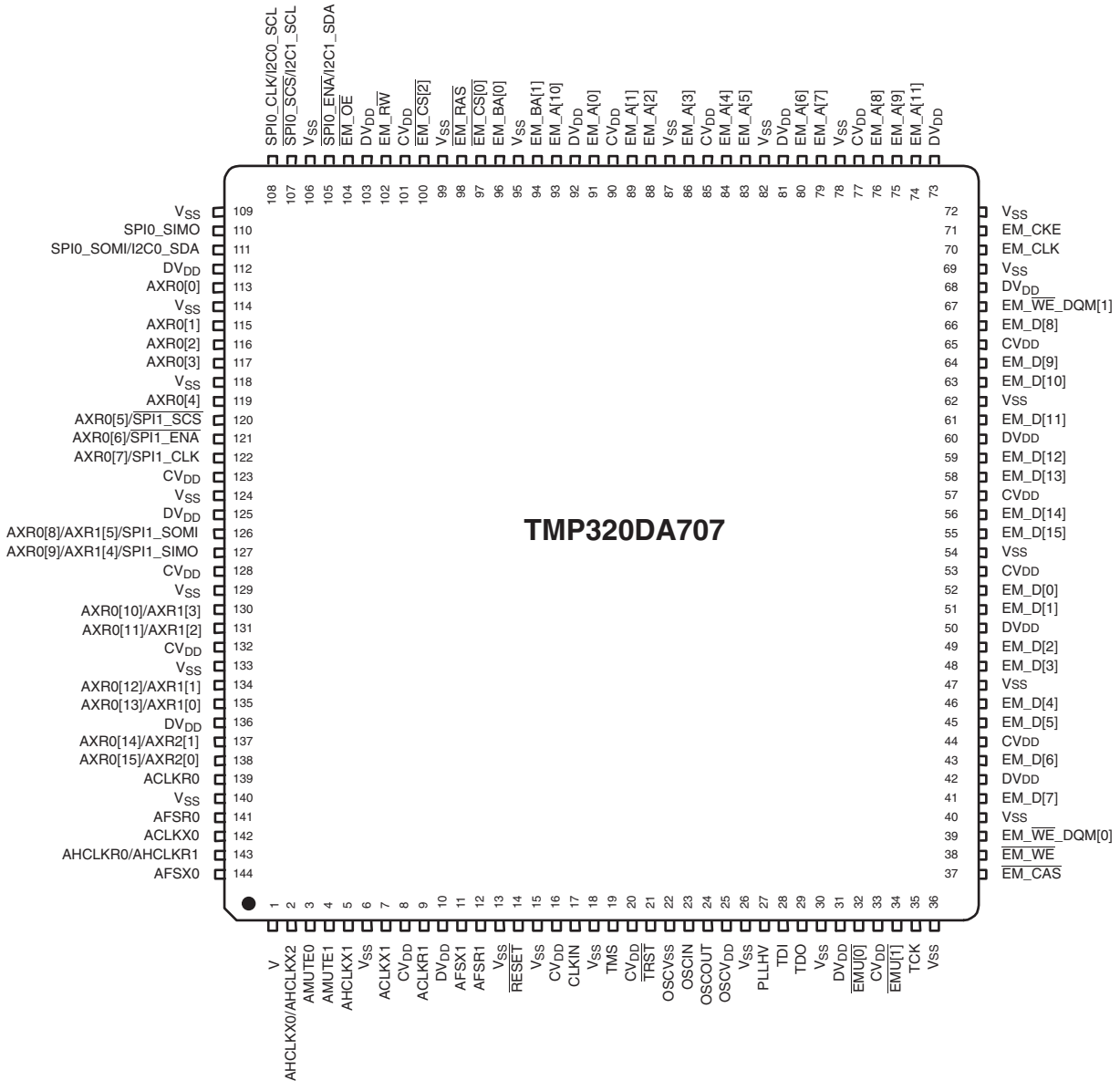
SYSTEM DIAGRAM with PERIPHERALS



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS-3

Q201 : D707E001RFP250 (32 bit Floating-Point Digital Signal Processor)-3/7

PIN CONFIGURATION



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS-4

Q201 : D707E001RFP250 (32 bit Floating-Point Digital Signal Processor)-4/7

TERMINAL DESCRIPTION (1/4)

SIGNAL NAME	PIN NO.	TYPE	PULL	GPIO	DESCRIPTION
External Memory Interface (EMIF) Address and Control					
EM_A[0]	91	O	-	N	EMIF Address Bus
EM_A[1]	89	O	-	N	
EM_A[2]	88	O	-	N	
EM_A[3]	86	O	-	N	
EM_A[4]	84	O	-	N	
EM_A[5]	83	O	-	N	
EM_A[6]	80	O	-	N	
EM_A[7]	79	O	-	N	
EM_A[8]	76	O	-	N	
EM_A[9]	75	O	-	N	
EM_A[10]	93	O	-	N	
EM_A[11]	74	O	-	N	
EM_BA[0]	96	O	-	N	SDRAM Bank Address and Asynchronous Memory
EM_BA[1]	94	O	-	N	Low-Order Address
$\overline{\text{EM\_CS[0]}}$	97	O	-	N	SDRAM Chip Select
$\overline{\text{EM\_CS[2]}}$	100	O	-	N	Asynchronous Memory Chip Select
$\overline{\text{EM\_CAS}}$	37	O	-	N	SDRAM Column Address Strobe
$\overline{\text{EM\_RAS}}$	98	O	-	N	SDRAM Row Address Strobe
$\overline{\text{EM\_WE}}$	38	O	-	N	SDRAM Write Enable
EM_CKE	71	O	-	N	SDRAM Clock Enable
EM_CLK	70	O	-	N	SDRAM Clock
EM_WE_DQM[0]	39	O	-	N	Write Enable or Byte Enable for EM_D[7:0]
EM_$\overline{\text{WE}}$_DQM[1]	67	O	-	N	Write Enable or Byte Enable for EM_D[15:8]
$\overline{\text{EM\_OE}}$	104	O	-	N	SDRAM Output Enable
EM_$\overline{\text{RW}}$	102	O	-	N	Asynchronous Memory Read/not Write

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS-5

Q201 : D707E001RFP250 (32 bit Floating-Point Digital Signal Processor)-5/7

TERMINAL DESCRIPTION (2/4)

SIGNAL NAME	PIN NO.	TYPE	PULL	GPIO	DESCRIPTION
External Memory Interface (EMIF) Data Bus					
EM_D[0]	52	IO	-	N	EMIF Data Bus [Lower16Bits]
EM_D[1]	51	IO	-	N	
EM_D[2]	49	IO	-	N	
EM_D[3]	48	IO	-	N	
EM_D[4]	46	IO	-	N	
EM_D[5]	45	IO	-	N	
EM_D[6]	43	IO	-	N	
EM_D[7]	41	IO	-	N	
EM_D[8]	66	IO	-	N	
EM_D[9]	64	IO	-	N	
EM_D[10]	63	IO	-	N	
EM_D[11]	61	IO	-	N	
EM_D[12]	59	IO	-	N	
EM_D[13]	58	IO	-	N	
EM_D[14]	56	IO	-	N	
EM_D[15]	55	IO	-	N	

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS-6

Q201 : D707E001RFP250 (32 bit Floating-Point Digital Signal Processor)-6/7

TERMINAL DESCRIPTION (3/4)

SIGNAL NAME	PIN NO.	TYPE	PULL	GPIO	DESCRIPTION
McASP0, McASP1, McASP2, and SPI1 Serial Ports					
AHCLKR0/AHCLKR1	143	IO	-	Y	McASP0 and McASP1 Receive Master Clock
ACLKR0	139	IO	-	Y	McASP0 Receive Bit Clock
AFSR0	141	IO	-	Y	McASP0 Receive Frame Sync (L/R Clock)
AHCLKX0/AHCLKX2	2	IO	-	Y	McASP0 and McASP2 Transmit Master Clock
ACLKX0	142	IO	-	Y	McASP0 Transmit Bit Clock
AFSX0	144	IO	-	Y	McASP0 Transmit Frame Sync (L/R Clock)
AMUTE0	3	O	-	Y	McASP0 MUTE Output
AXR0[0]	113	IO	-	Y	McASP0 Serial Data 0
AXR0[1]	115	IO	-	Y	McASP0 Serial Data 1
AXR0[2]	116	IO	-	Y	McASP0 Serial Data 2
AXR0[3]	117	IO	-	Y	McASP0 Serial Data 3
AXR0[4]	119	IO	-	Y	McASP0 Serial Data 4
AXR0[5]/$\overline{\text{SPI1\_SCS}}$	120	IO	-	Y	McASP0 Serial Data 5 ***or*** SPI1 Slave Chip Select
AXR0[6]/$\overline{\text{SPI1\_ENA}}$	121	IO	-	Y	McASP0 Serial Data 6 ***or*** SPI1 Enable (Ready)
AXR0[7]/SPI1_CLK	122	IO	-	Y	McASP0 Serial Data 7 ***or*** SPI1 Serial Clock
AXR0[8]/AXR1[5]/ SPI1_SOMI	126	IO	-	Y	McASP0 Serial Data 8 ***or*** McASP1 Serial Data 5 ***or*** SPI1 Data Pin Slave Out Master In
AXR0[9]/AXR1[4]/ SPI1_SIMO	127	IO	-	Y	McASP0 Serial Data 9 ***or*** McASP1 Serial Data 4 ***or*** SPI1 Data Pin Slave In Master Out
AXR0[10]/AXR1[3]	130	IO	-	Y	McASP0 Serial Data 10 ***or*** McASP1 Serial Data 3
AXR0[11]/AXR1[2]	131	IO	-	Y	McASP0 Serial Data 11 ***or*** McASP1 Serial Data 2
AXR0[12]/AXR1[1]	134	IO	-	Y	McASP0 Serial Data 12 ***or*** McASP1 Serial Data 1
AXR0[13]/AXR1[0]	135	IO	-	Y	McASP0 Serial Data 13 ***or*** McASP1 Serial Data 0
AXR0[14]/AXR2[1]	137	IO	-	Y	McASP0 Serial Data 14 ***or*** McASP2 Serial Data 1
AXR0[15]/AXR2[0]	138	IO	-	Y	McASP0 Serial Data 15 ***or*** McASP2 Serial Data 0
ACLKR1	9	IO	-	Y	McASP1 Receive Bit Clock
AFSR1	12	IO	-	Y	McASP1 Receive Frame Sync (L/RClock)
AHCLKX1	5	IO	-	Y	McASP1 Transmit Master Clock
ACLKX1	7	IO	-	Y	McASP1 Transmit Bit Clock
AFSX1	11	IO	-	Y	McASP1 Transmit Frame Sync (L/RClock)
AMUTE1	4	O	-	Y	McASP1 MUTE Output
SPI0, I2C0, and I2C1 Serial Port Pins					
SPI0_SOMI/I2C0_SDA	111	IO	-	Y	SPI0 Data Pin Slave Out Master In ***or*** I2C0 Serial Data
SPI0_SIMO	110	IO	-	Y	SPI0 Data Pin Slave In Master Out
SPI0_CLK/I2C0_SCL	108	IO	-	Y	SPI0 Serial Clock ***or*** I2C0 Serial Clock
$\overline{\text{SPI0\_SCS}}$/I2C1_SCL	107	IO	-	Y	SPI0 Slave Chip Select ***or*** I2C1 Serial Clock
$\overline{\text{SPI0\_ENA}}$/I2C1_SDA	105	IO	-	Y	SPI0 Enable (Ready) ***or*** I2C1 Serial Data

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS-7

Q201 : D707E001RFP250 (32 bit Floating-Point Digital Signal Processor)-7/7

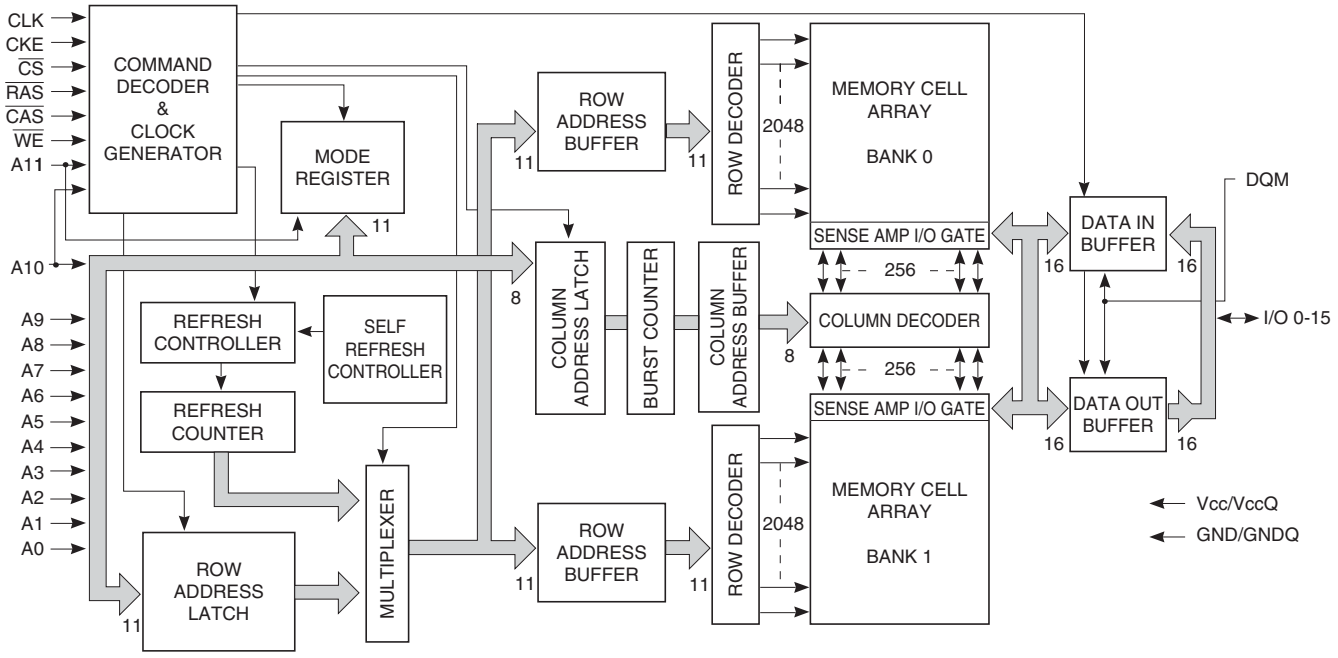
TERMINAL DESCRIPTION (4/4)

SIGNAL NAME	PIN NO.	TYPE	PULL	GPIO	DESCRIPTION
Clocks					
OSCIN	23	I	-	N	1.2-V Oscillator Input
OSCOUT	24	O	-	N	1.2-V Oscillator Output
$OSCV_{DD}$	25	PWR	-	N	Oscillator 1.2-V V_{DD} tap point (for filter only)
$OSCV_{SS}$	22	PWR	-	N	Oscillator V_{SS} tap point (for filter only)
CLKIN	17	I	-	N	Alternate clock input (3.3-V LVCMOS Input)
PLLHV	27	PWR	-	N	PLL 3.3-V Supply Input (requires external filter)
Device Reset					
$\overline{RESET}$	14	I	-	N	Device reset pin
Emulation/JTAG Port					
TCK	35	I	IPU	N	Test Clock
TMS	19	I	IPU	N	Test Mode Select
TDI	28	I	IPU	N	Test Data In
TDO	29	OZ	IPU	N	Test Data Out
$\overline{TRST}$	21	I	IPD	N	Test Reset
$\overline{EMU[0]}$	32	IO	IPU	N	Emulation Pin 0
$\overline{EMU[1]}$	34	IO	IPU	N	Emulation Pin 1
Power Pins					
Core Supply (CV_{DD})	8, 16, 20, 33, 44, 53, 57, 65, 77, 85, 90, 101, 123, 128, 132				
IO Supply (DV_{DD})	10, 31, 42, 50, 60, 68, 73, 81, 92, 103, 112, 125, 136				
Ground (V_{SS})	1, 6, 13, 15, 18, 26, 30, 36, 40, 47, 54, 62, 69, 72, 78, 82, 87, 95, 99, 106, 109, 114, 118, 124, 129, 133, 140				

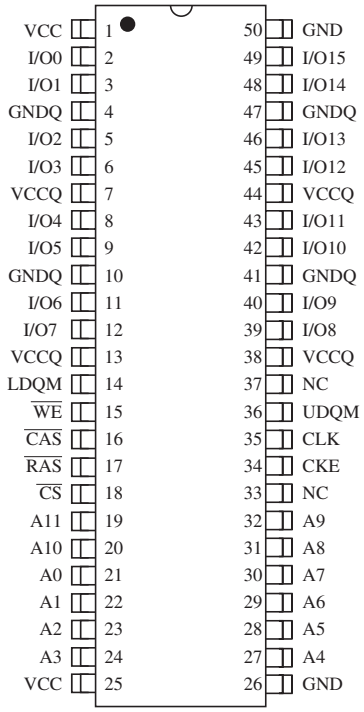
IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS-8

Q281 : IC42S16100 (16-Mbit Synchronous Dynamic RAM)-1/2

BLOCK DIAGRAM



PIN CONFIGURATION



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS-9

Q281 : IC42S16100 (16-Mbit Synchronous Dynamic RAM)-2/2

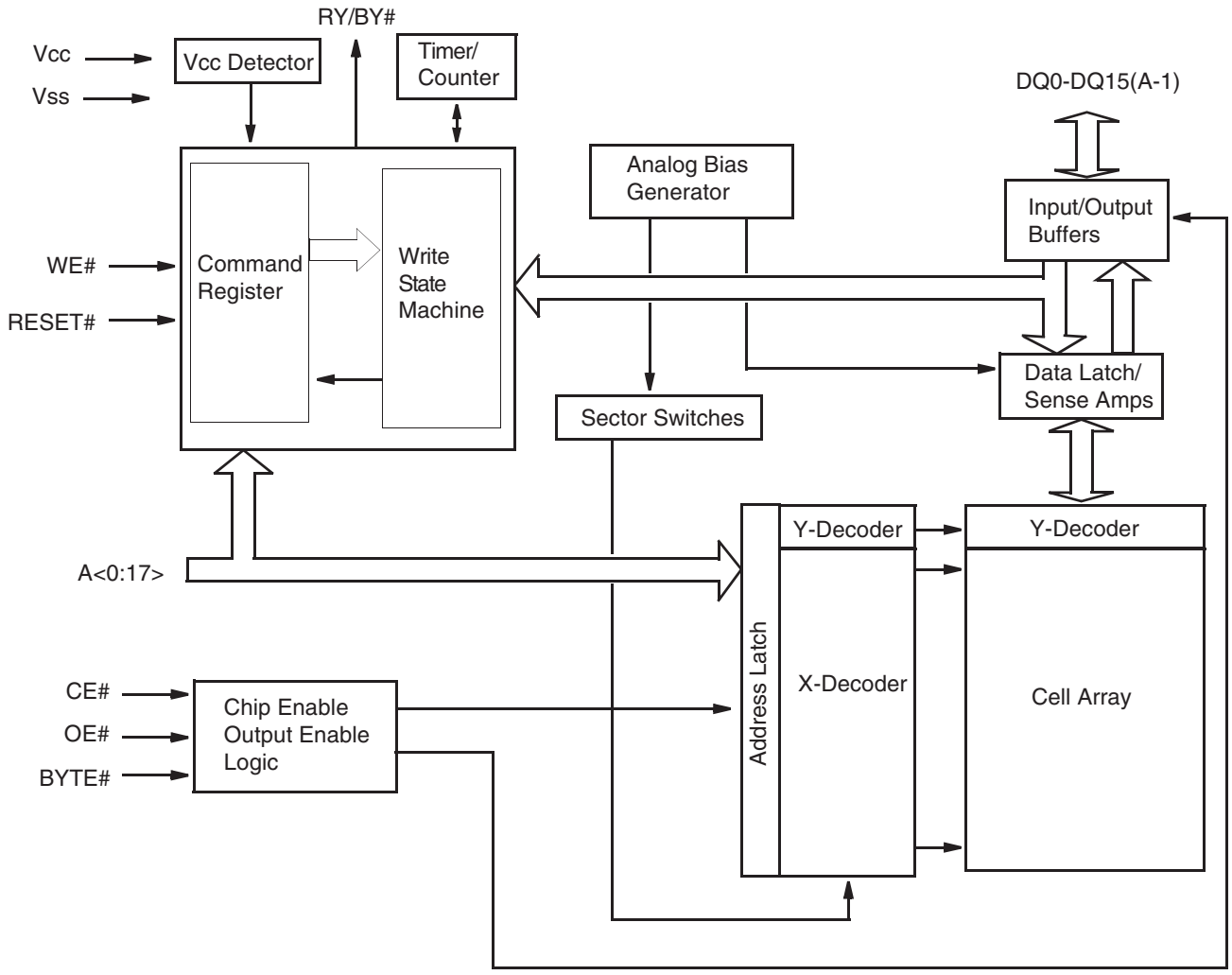
TERMINAL DESCRIPTION

Pin No.	Pin name	Function (In Detail)
20 to 24 27 to 32	A0-A10	A0 to A10 are address inputs. A0-A10 are used as row address inputs during active command input and A0-A7 as column address inputs during read or write command input. A10 is also used to determine the precharge mode during other commands. If A10 is LOW during precharge command, the bank selected by A11 is precharged, but if A10 is HIGH, both banks will be precharged. When A10 is HIGH in read or write command cycle, the precharge starts automatically after the burst access. These signals become part of the OP CODE during mode register set command input.
19	A11	A11 is the bank selection signal. When A11 is LOW, bank 0 is selected and when high, bank 1 is selected. This signal becomes part of the OP CODE during mode register set command input.
16	$\overline{CAS}$	$\overline{CAS}$, in conjunction with the $\overline{RAS}$ and $\overline{WE}$, forms the device command. See the "Command Truth Table" item for details on device commands.
34	CKE	The CKE input determines whether the CLK input is enabled within the device. When is CKE HIGH, the next rising edge of the CLK signal will be valid, and when LOW, invalid. When CKE is LOW, the device will be in either the power-down mode, the clock suspend mode, or the self refresh mode. The CKE is an asynchronous input.
35	CLK	CLK is the master clock input for this device. Except for CKE, all inputs to this device are acquired in synchronization with the rising edge of this pin.
18	$\overline{CS}$	The $\overline{CS}$ input determines whether command input is enabled within the device. Command input is enabled when $\overline{CS}$ is LOW, and disabled with $\overline{CS}$ is HIGH. The device remains in the previous state when $\overline{CS}$ is HIGH.
2, 3, 5, 6, 8, 9, 11, 12, 39, 40, 42, 43, 45, 46, 48, 49	I/O0 to I/O15	I/O0 to I/O15 are I/O pins. I/O through these pins can be controlled in byte units using the LDQM and UDQM pins.
14, 36	LDQM, UDQM	LDQM and UDQM control the lower and upper bytes of the I/O buffers. In read mode, LDQM and UDQM control the output buffer. When LDQM or UDQM is LOW, the corresponding buffer byte is enabled, and when HIGH, disabled. The outputs go to theHIGH impedance state when LDQM/UDQM is HIGH. This function corresponds to $\overline{OE}$ in conventional DRAMs. In write mode, LDQM and UDQM control the input buffer. When LDQM or UDQM is LOW, the corresponding buffer byte is enabled, and data can be written to the device. When LDQM or UDQM is HIGH, input data is masked and cannot be written to the device.
17	$\overline{RAS}$	$\overline{RAS}$, in conjunction with $\overline{CAS}$ and $\overline{WE}$, forms the device command. See the "Command Truth Table" item for details on device commands.
15	$\overline{WE}$	$\overline{WE}$, in conjunction with $\overline{RAS}$ and $\overline{CAS}$, forms the device command. See the "Command Truth Table" item for details on device commands.
7, 13, 38, 44	$V_{CC}Q$	$V_{CC}Q$ is the output buffer power supply.
1, 25	V_{CC}	V_{CC} is the device internal power supply.
4, 10, 41, 47	GNDQ	GNDQ is the output buffer ground.
26, 50	GND	GND is the device internal ground.

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS-10

Q282 : ES29LV400 (4 Mbit Flash Memory)

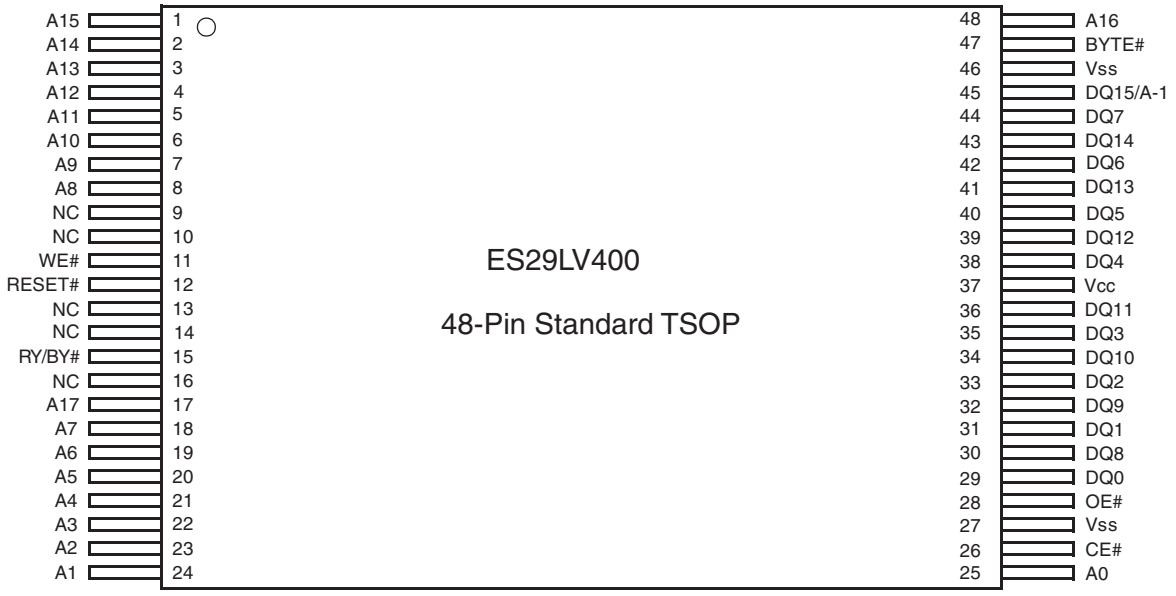
BLOCK DIAGRAM



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS-11

Q282 : ES29LV400 (4 Mbit Flash Memory)

PIN CONFIGURATION



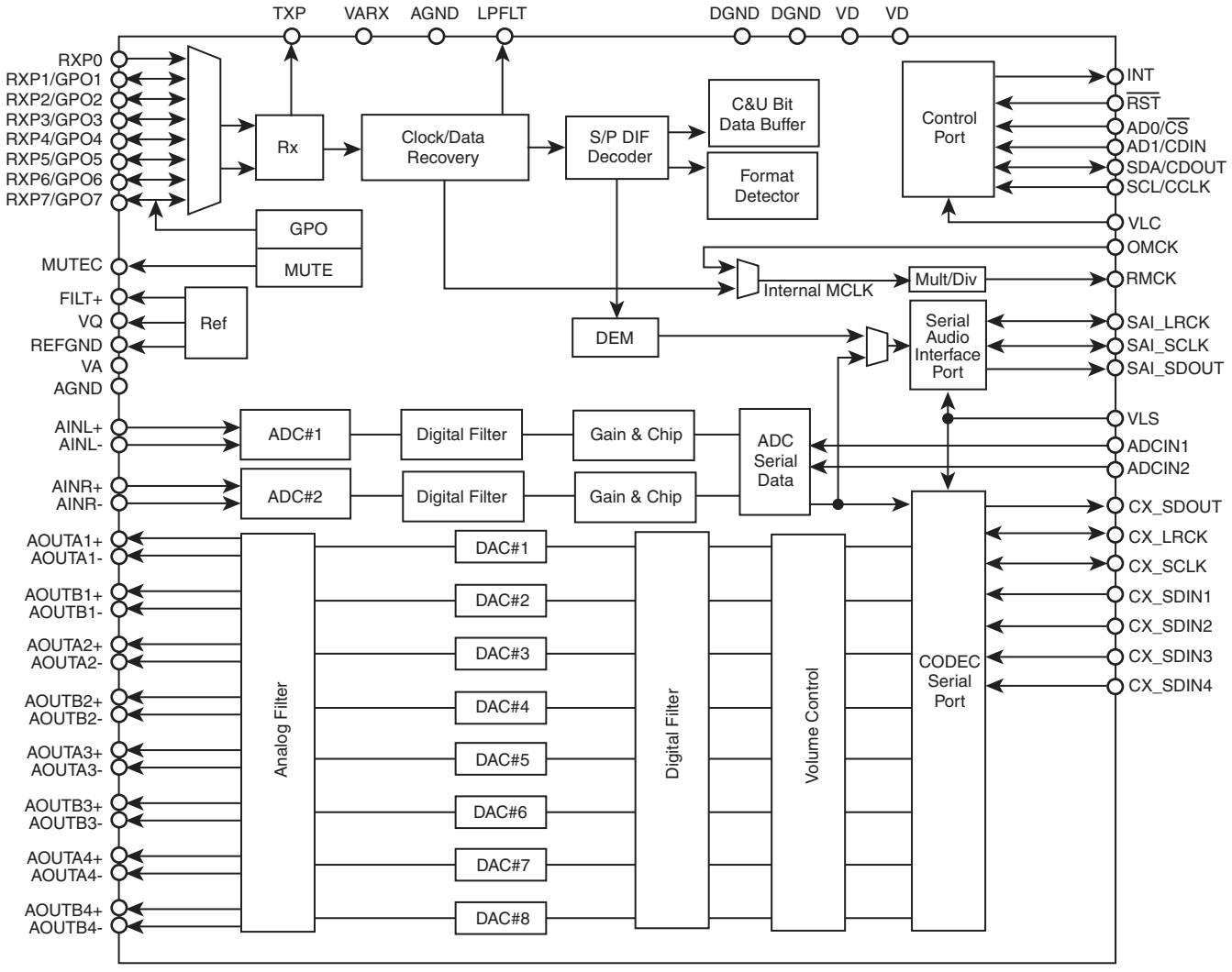
TERMINAL DESCRIPTION

Terminal	Description
A0-A17	18 Addresses
DQ0-DQ14	15 Data Inputs/Outputs
DQ15/A-1	DQ15 (Data Input/Output, Word Mode) A-1 (LSB Address Input, Byte Mode)
CE#	Chip Enable
OE#	Output Enable
WE#	Write Enable
RESET#	Hardware Reset Pin, Active Low
BYTE#	Selects 8-bit or 16-bit mode
RY/BY#	Ready/Busy Output
Vcc	3.0 volt-only single power supply (see Product Selector Guide for speed options and voltage supply tolerances)
Vss	Device Ground
NC	Pin Not Connected Internally

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS-12

Q301 : CS42518 (8-ch Codec with S/PDIF Receiver)-1/4

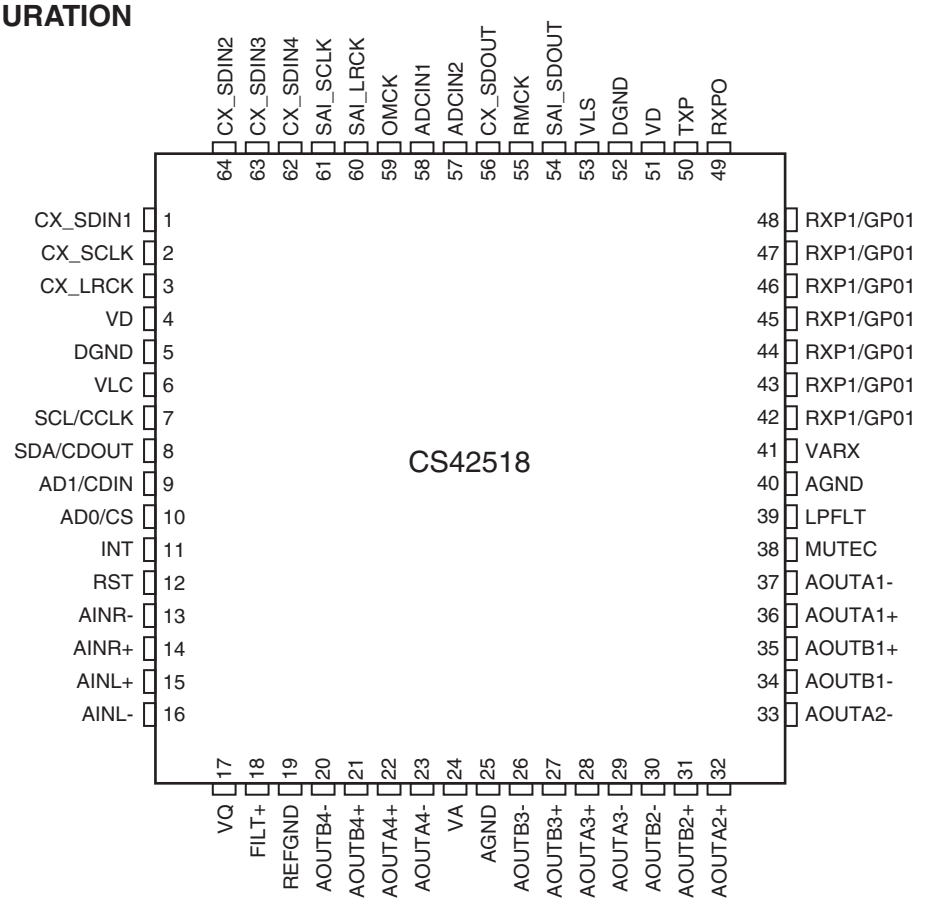
BLOCK DIAGRAM



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS-13

Q301 : CS42518 (8-ch Codec with S/PDIF Receiver)-2/4

PIN CONFIGURATION



TERMINAL DESCRIPTION(1/3)

Pin Name	#	Pin Description
CX_SDIN1 CX_SDIN2 CX_SDIN3 CX_SDIN4	1 64 63 62	Codec Serial Audio Data Input (Input) - Input for two's complement serial audio data.
CX_SCLK	2	CODEC Serial Clock (Input/Output) - Serial clock for the CODEC serial audio interface
CX_LRCK	3	CODEC Left Right Clock (Input/ Output) - Determines which channel, Left or Right, is currently active on the CODEC serial audio data line.
VD	4 51	Digital Power (Input) - Positive power supply for the digital section.
DGND	5 52	Digital Ground (Input) - Ground reference. Should be connected to digital ground.
VLC	6	Control Port Power (Input) - Determines the required signal level for the control port.
SCL/CCLK	7	Serial Control Port Clock (Input) - Serial clock for the serial control port. Requires an external pull-up resistor to the logic interface voltage in I2C mode as shown in the Typical Connection Diagram.
SDA/CDOUT	8	Serial Control Data (Input/Output) - SDA is a data I/O line in IC mode and requires an external pull-up resistor to the logic interface voltage, as shown in the Typical connection Diagram. CDOUT is the output data line for the control port interface in SPI mode.
AD1/CDIN	9	Address Bit 1 (I2C)/Serial Control Data (SPI) (Input) - AD1 a chip address pin in I2C mode; CDIN is the input data line for control port interface in SPI mode.

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS-14

Q301 : CS42518 (8-ch Codec with S/PDIF Receiver)-3/4

TERMINAL DESCRIPTION(2/3)

Pin Name	#	Pin Description
AD0/CS	10	Address Bit 0 (I2C)/Control Port Chip Select (SPI) (INput) - AD0 is a chip address pin in I2C mode; CS is the chip select signal in SPI mode.
INT	11	Interrupt (Ountput) - The CS42518 will generate an interrupt condition as per the Interrupt Mask register.
RST	12	Reset (Input) - The device enters a low power mode and all internal registers are reset to their default settings when low.
AINR- AINR+	13 14	Differential right Channel Analog Input (Input) - Signals are presented differentially to the delta-sigma modulators via the AINR+/- pins.
AINL- AINL+	15 16	Differential right Channel Analog Input (Input) - Signals are presented differentially to the delta-sigma modulators via the AINR+/- pins.
VQ	17	Quiescent Voltage (Output) - Filter connection for internal quiescent reference voltage.
FILT+	18	Positive Voltage Reference (Output) - Positive reference voltage for the internal sampling circuits.
REFGND	19	Reference Ground (Input) - Ground reference for the internal sampling circuits.
AOUTA1 +, - AOUTB1 +, - AOUTA2 +, - AOUTB2 +, - AOUTA3 +, - AOUTB3 +, - AOUTA4 +, - AOUTB4 +, -	36, 37 35, 34 32, 33 31, 30 28, 29 27, 26 22, 23 21, 20	Differential Analog Output (Output) - The full-scale differential analog output level is specified in the Analog Characteristics specification table.
VA VARX	24 41	Analog Power (Input) - Positive power supply for the analog section.
AGND	25 40	Analog Ground (Input) - Ground reference. Should be connected to analog ground.
MUTEC	38	Mute Control (Output) - The Mute Control pin outputs high impedance following an initial power -on condition or whenever the PDN bit is set to a "1", forcing the codec into power -down mode. The signal will remain in a high impedance state as long as the part is in power-down mode. The Mute Control pin goes to the selected "active" state during reset, muting, or if the master clock to left/right clock frequency ratio is incorrect. This pin is intended to be used as a control for external mute circuits to prevent the clicks and pops that can occur in any single supply system. The use of external mute circuits are not mandatoy but may be desired for designs requiring the absolute minimum in extraneous clicks and pops.
LPFLT	39	PLL Loop Filer (Output) - An RC network should be connected between this pin and ground.
RXP7/GPO7 RXP6/GPO6 RXP5/GPO5 RXP4/GPO4 RXP3/GPO3 RXP2/GPO2 RXP1/GPO1	42 43 44 45 46 47 48	S/PDIF Receiver Input/ General Purpose Output (Input/ Output) - Receiver inputs for S/PDIF encoded data. The CS42518 has an internal 8:2 multiplexer to select the active receiver port, according to the Receiver Mode Control 2 resister. These pins can also be configured as general purpose output pins, ADC Overflow indicators or Mute Control outputs according to the RXP/General Purpose Pin Control resisters.
RXP0	49	S/PDIF Receiver Input (Input) - Dedicated receiver input for S/PDIF encoded data.
TXP	50	S/PDIF Transmitter Output (Output) - S/PDIF encoded data output, mapped directly from one of the receiver inputs as indicated by the Receiver Mode Control 2 resister.
VLP	53	Serial Port Interface Power (Input) - Determines the required signal level for the serial port interfaces.
SAI_SDOUT	54	Serial Audio Interface Serial Data Output (Output) - Output for two's complement serial audio PCM data from the S/PDIF incoming stream. This pin can also be configured to transmit the output of the internal and external ADCs.
RMCK	55	Recovered Master Clock (Output) - Recovered master clock output from the External Clock Reference

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS-15

Q301 : CS42518 (8-ch Codec with S/PDIF Receiver)-4/4

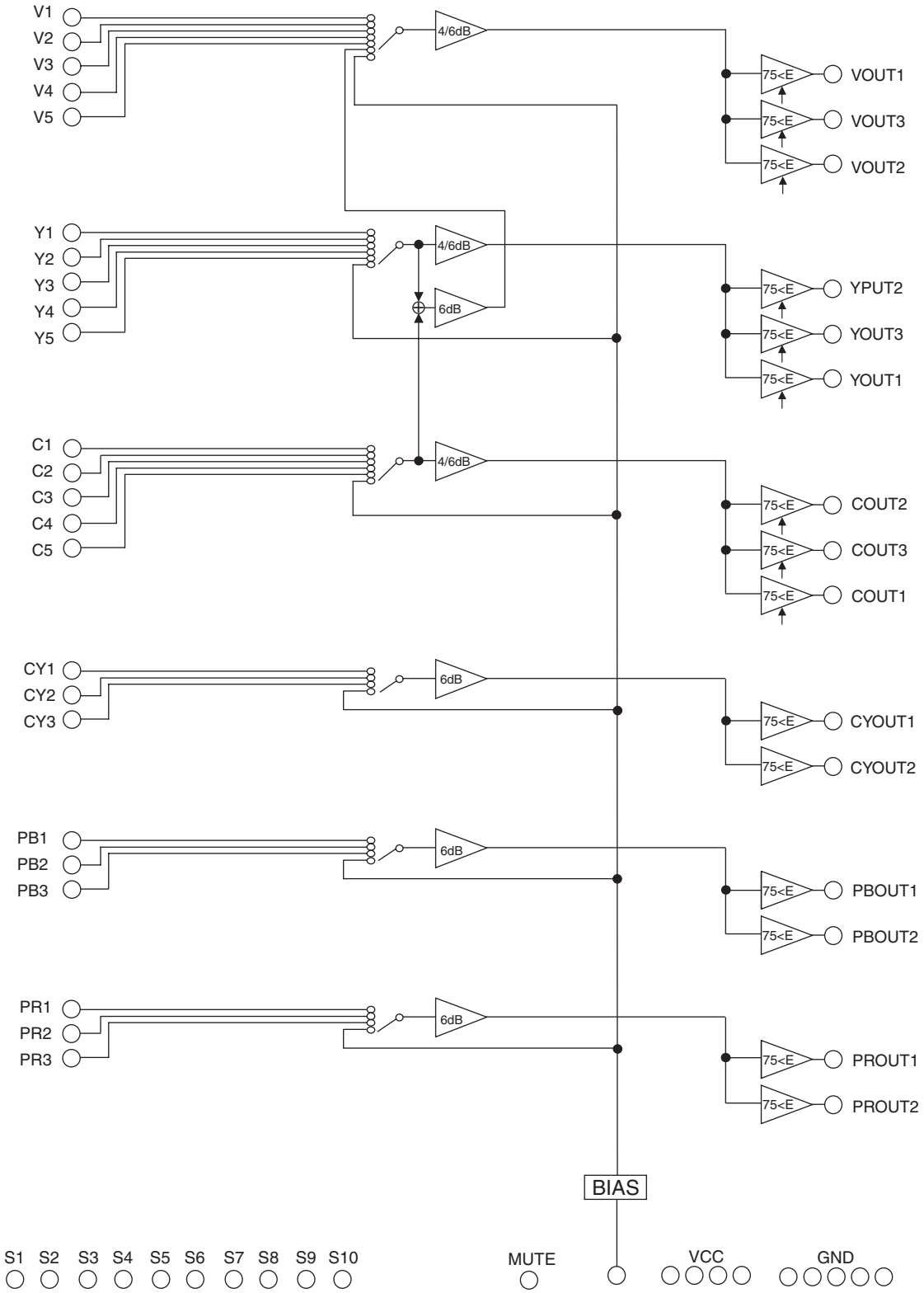
TERMINAL DESCRIPTION(3/3)

Pin Name	#	Pin Description
CL_SDOUT	56	CODEC Serial Data Output (Output) - Output for two's complement serial audio data the internal and external ADCs.
ADCIN1 ADCIN2	58 57	External ADC Serial Input (Input) - The CS42518 provides for up two external stereo analog to digital converter inputs to provide a maximum of six channels on serial data output line when the CS42518 is placed in One Line mode.
OMCK	59	External Reference Clock (Input) - External clock reference that must be within the ranges specified in currently active on the serial audio data line.
SAI_LRCK	60	Serial Audio Interface Left/Right Clock (Input/Output) - Determines which channel, Left of Right, is currently active on the serial audio data line.
SAI_LRCK	61	Serial Audio Interface Serial Clock (Input/Output) - Serial clock for the Serial Audio Interface

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS-16

Q3001 : AN15880A (Video SW for Receiver with Multi-signal)-1/4

BLOCK DIAGRAM



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS-17

Q3001 : AN15880A (Video SW for Receiver with Multi-signal)-2/4

TERMINAL DESCRIPTION (1/2)

Pin No.	Pin name	Type	Descripion
1	Y1	Input	Luminance signal input 1
2	Y2	Input	Luminance signal input 2
3	Y3	Input	Luminance signal input 3
4	Y4	Input	Luminance signal input 4
5	Y5	Input	Luminance signal input 5
6	VCC1	Power supply	5.0 V power supply
7	BIAS	Output	Bias voltage
8	C1	Input	Chrominance signal input 1
9	C2	Input	Chrominance signal input 2
10	C3	Input	Chrominance signal input 3
11	C4	Input	Chrominance signal input 4
12	C5	Input	Chrominance signal input 5
13	GND1	Ground1	Ground
14	CY1	Input	CY1 signal input
15	CY2	Input	CY2 signal input
16	CY3	Input	CY3 signal input
17	PB1	Input	PB1 signal input
18	PB2	Input	PB2 signal input
19	PB3	Input	PB3 signal input
20	PR1	Input	PR1 signal input
21	PR2	Input	PR2 signal input
22	PR3	Input	PR3 signal input
23	S1	Input	Logic control input 1
24	PROUT2	Output	PROUT2 signal output
25	S2	Input	Logic control input 2
26	S3	Input	Logic control input 3
27	PROUT1	Output	PROUT1 signal output
28	S4	Input	Logic control input 4
29	GND5	Ground	Ground
30	S5	Input	Logic control input 5
31	VCC5	Power supply	5.0 V power supply
32	PBOUT2	Output	PBOUT2 signal output
33	PBOUT1	---	PBOUT1 signal output
34	NC1	Output	No connection
35	CYOUT2	Output	CYOUT2 signal output

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS-18

Q3001 : AN15880A(Video SW for Receiver with Multi-signal)-3/4

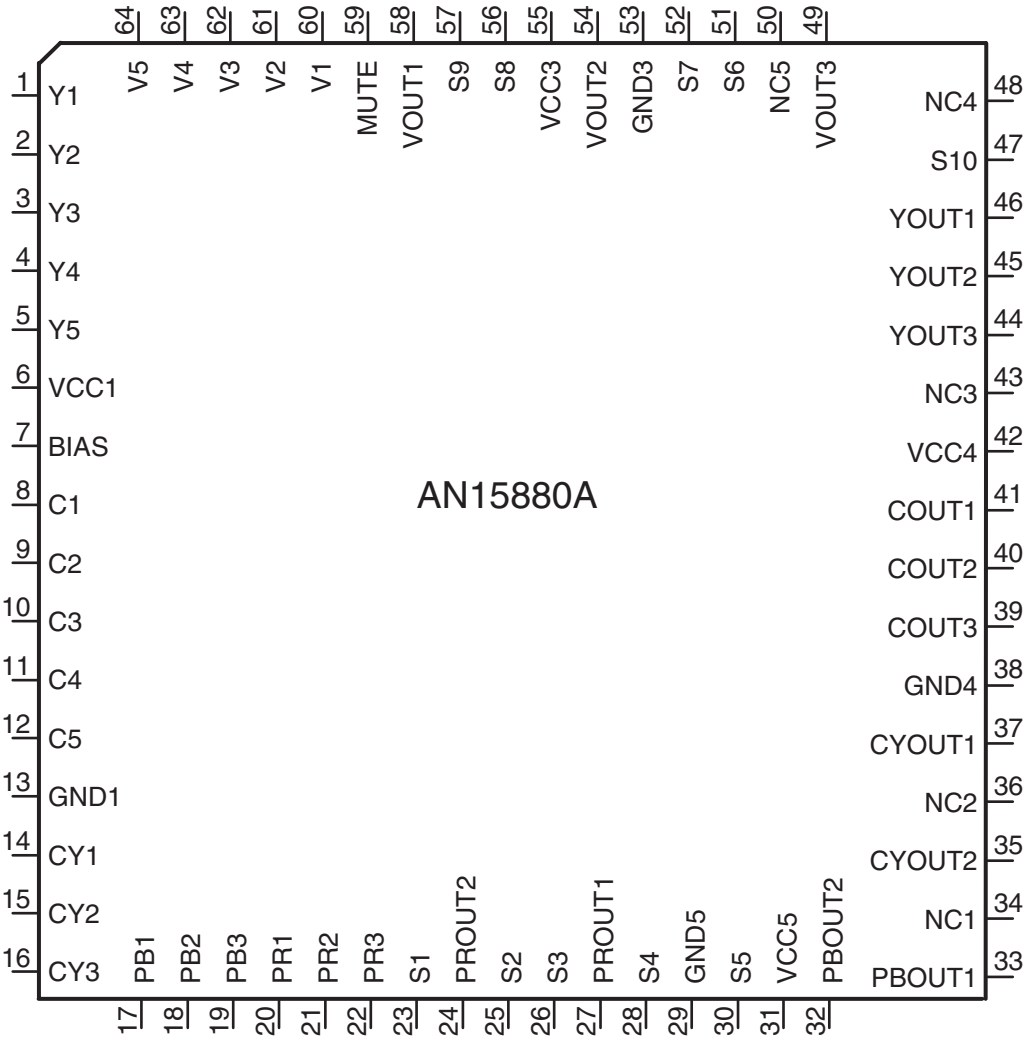
TERMINAL DESCRIPTION (2/2)

Pin No.	Pin name	Type	Description
36	NC2	-	No connection
37	CYOUT1	Output	CYOUT1 signal output
38	GND4	Ground	Ground
39	COUT3	Output	COUT3 signal output
40	COUT2	Output	COUT2 signal output
41	COUT1	Output	COUT1 signal output
42	VCC4	Power supply	5.0 V power supply
43	NC3	-	No connection
44	YOUT3	Output	YOUT3 signal output
45	YOUT2	Output	YOUT2 signal output
46	YOUT1	Output	YOUT1 signal output
47	S10	Input	Logic control input 10
48	NC4	-	No connection
49	VOUT3	Output	VOUT3 signal output
50	NC5	-	No connection
51	S6	Input	Logic control input 6
52	S7	Input	Logic control input 7
53	GND3	Ground	Ground
54	VOUT2	Output	VOUT2 signal output
55	VCC3	Power supply	5.0 V power supply
56	S8	Input	Logic control input 8
57	S9	Input	Logic control input 9
58	VOUT1	Output	VOUT1 signal output
59	MUTE	Input	Logic mute control input
60	V1	Input	Video composite signal input 1
61	V2	Input	Video composite signal input 2
62	V3	Input	Video composite signal input 3
63	V4	Input	Video composite signal input 4
64	V5	Input	Video composite signal input 5

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS-19

Q3001: AN15880A (Video SW for Receiver with Multi-signal)-4/4

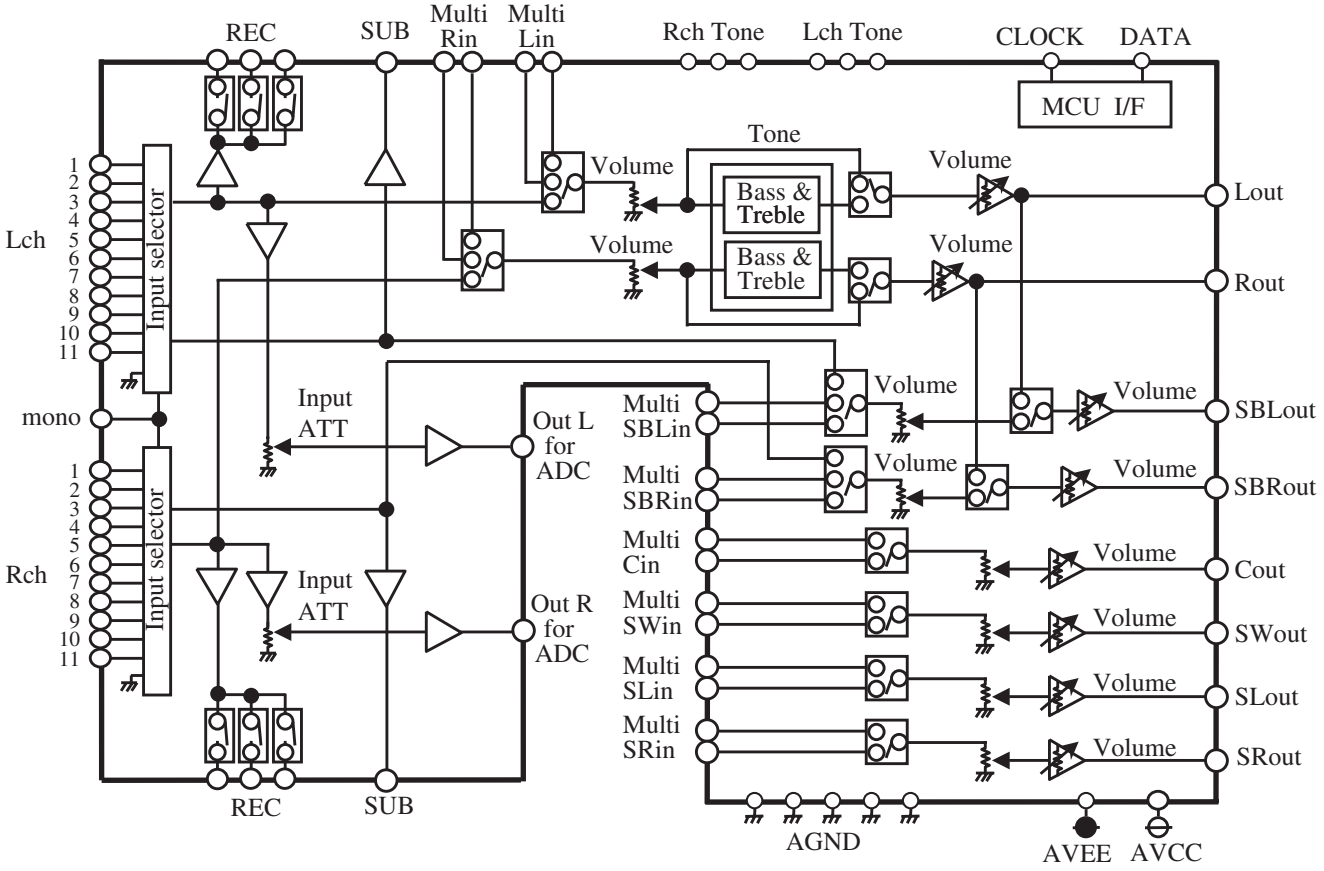
PIN CONFIGURATION



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS-20

Q5501 : R2S15211FP (8 ch Electronic Volume and 11 Input Selector and Tone Control)-1/3

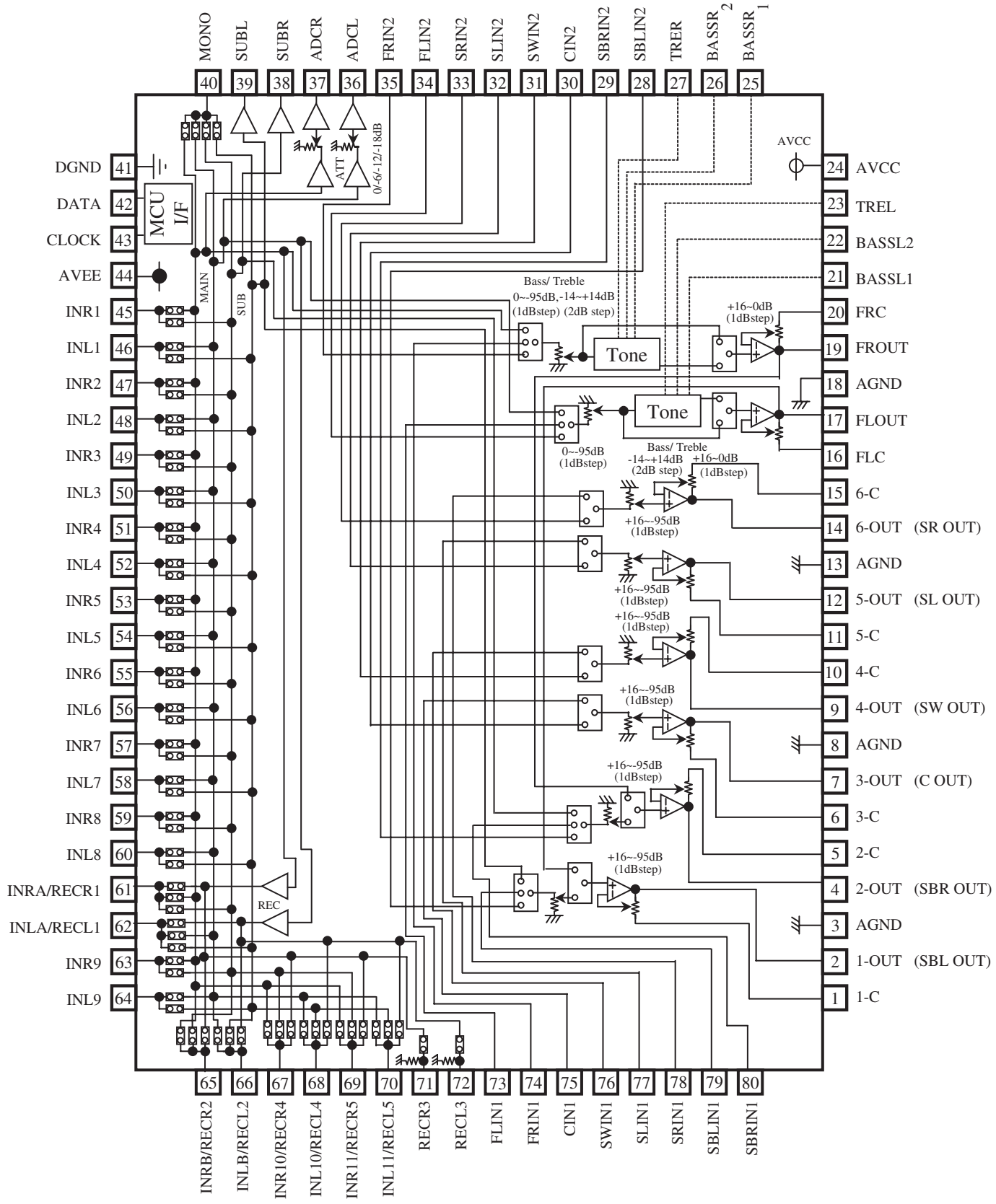
SYSTEM BLOCK DIAGRAM



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS-21

Q5501 : R2S15211FP (8 ch Electronic Volume and 11 Input Selector and Tone Control)-2/3

BLOCK DIAGRAM AND PIN CONFIGURATION



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS-22

Q5501 : R2S15211FP (8 ch Electronic Volume and 11 Input Selector and Tone Control)-3/3

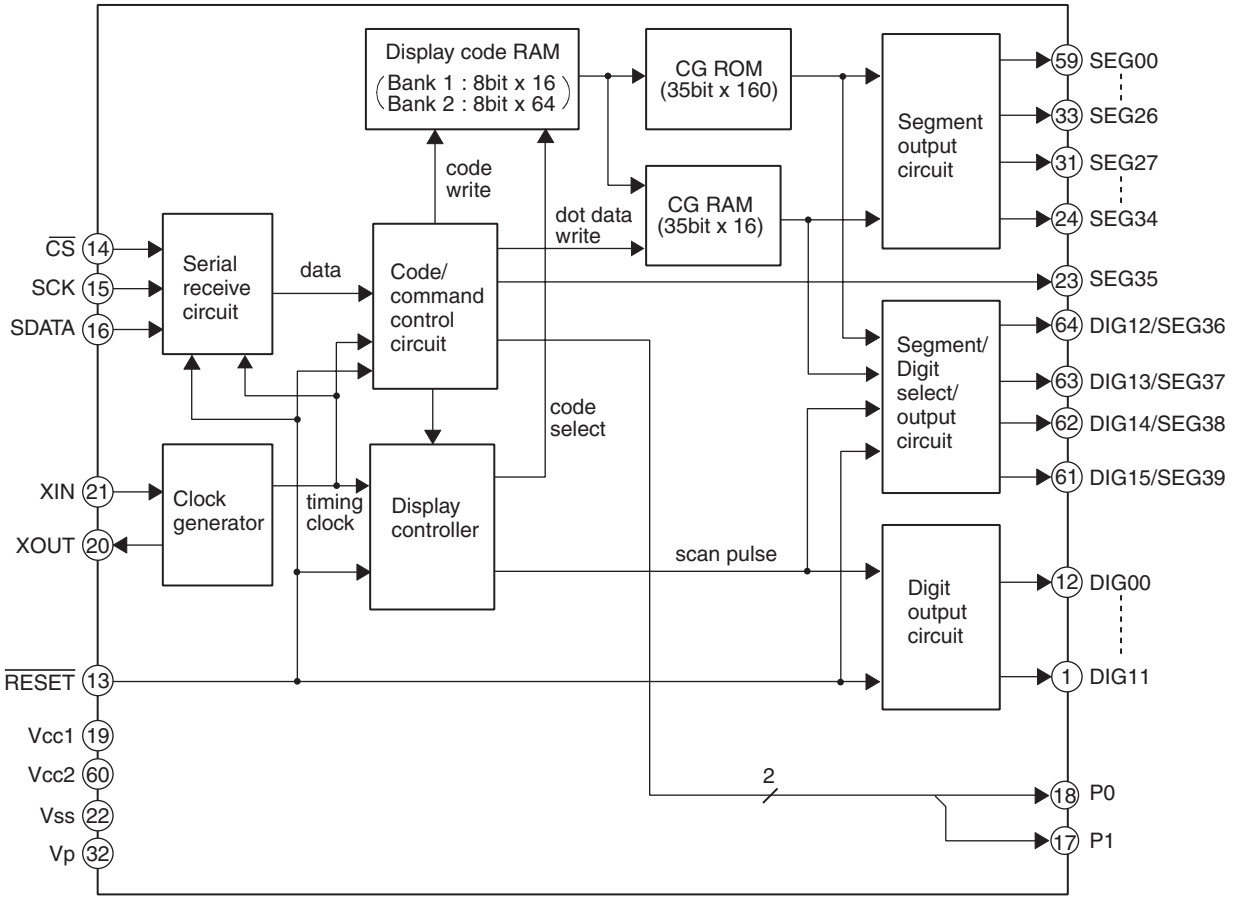
TERMINAL DESCRIPTION

PIN No.	Name	Function
19,17, 14,12, 9,7, 4,2	FROUT,FLOUT, 6-OUT,5-OUT, 4-OUT, 3-OUT, 2-OUT,1-OUT	Output pin of FL/FR/C/SW/SL/SR/SBL/SBR channel
20,16, 15,11, 10,6, 5,1	FRC,FLC, 6-C,5-C, 4-C,3-C, 2-C,1-C	Connects capacitor for reducing click noise of L/R/C/SW/SL/SR/SBL/SBR channel volume
3,8, 13,18	AGND	Analog ground of internal circuit
23,27	TREL, TRER	Frequency characteristic setting pin of L/R channel tone control(Treble)
21,22, 25,26	BASSL1, BASSL2 BASSR1, BASSR2	Frequency characteristic setting pin of L/R channel tone control(Bass)
24	AVCC	Positive power supply to internal circuit
35,34, 33,32, 31,30, 29,28	FRIN2, FLIN2, SRN2,SLIN2, SWIN2,CIN2, SBRIN2,SBLIN2	Input pin of L/R/C/SW/SL/SR/SBL/SBR channel (Multi IN 1/2)
73,74, 75,76, 77,78, 79,80	FLIN1, FRIN1, CIN1,SWIN1, SLIN1,SRIN1, SBLIN1,SBRIN1	
41	DGND	Digital ground of internal circuit
42	DATA	Input pin of control data
43	CLOCK	Input pin of control clock
44	AVEE	Negative power supply to internal circuit
46,48,50, 52,54,56, 58,60,64	INL1, INL2, INL3, INL4, INL5, INL6, INL7, INL8, INL9	Input pin of L/R channel (Input Selector)
45,47,49, 51,53,55, 57,59,63	INR1, INR2, INR3, INR4, INR5, INR6, INR7, INR8, INR9	
40	MONO	Input pin of monaural (Input Selector)
38,39	SUBL,SUBR	Output pin for L/R channel SUB Output
36,37	ADCL, ADCR	Output pin for L/R channel ADC
72	RECL3	Output pin for L/R channel REC Output
71	RECR3	
61,62, 65,66, 67,68, 69,70	INRA/RECR1,INLA/RECL1, INRB/RECR2,INLB/RECL2, INR10/RECR4,INL10/RECL4, INR11/RECR5,INL11/RECL5	Input pin of L/R channel (Input Selector)/ Output pin for L/R channel REC Output

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS-23

Q7003 : M66005 (FL Tube Driver)

BLOCK DIAGRAM



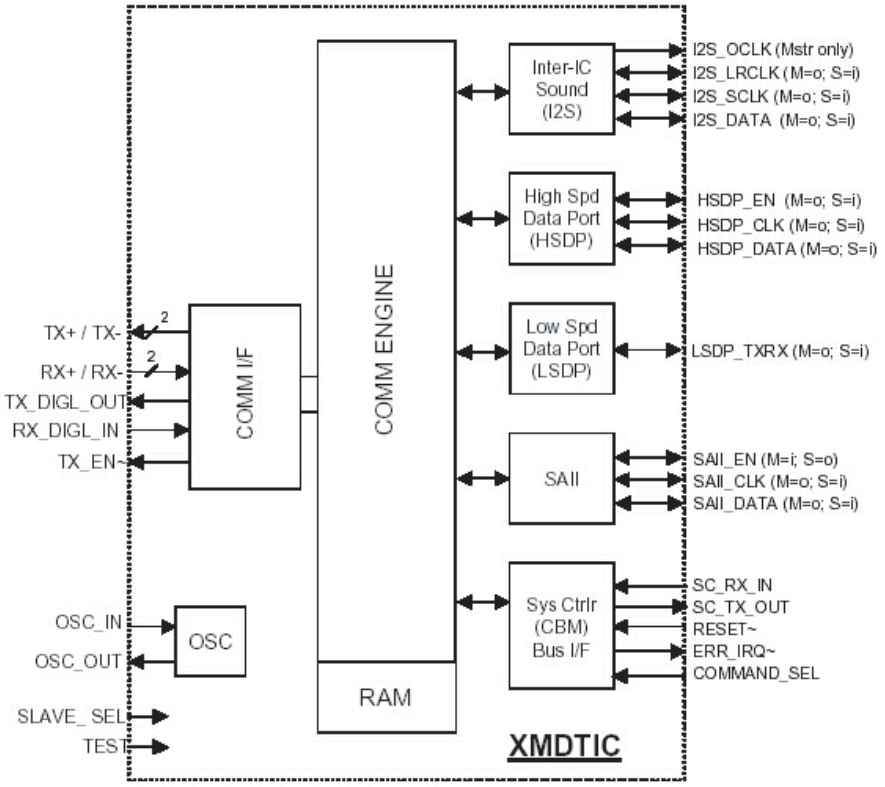
TERMINAL DESCRIPTION

PIN NO.	SYMBOL	PIN NAME	DESCRIPTION
13	$\overline{\text{RESET}}$	Reset input	This pin is used to initialize the internal state of the M66004.
14	$\overline{\text{CS}}$	Chip select input	"L" : Communication with the MCU is possible. "H" : Any instruction from the MCU is neglected.
15	SCK	Shift clock input	At the rising edge from "L" to "H", input data is shifted.
16	SDATA	Serial data input	Character code or command data to display is input from MSB.
21, 20	XIN, XOUT	Clock input Clock output	This pin is used to connect a resister and a capacitor externally to set oscillation frequency.
1~12 61~64	DIG00 ~ DIG15	Digit output	These pins are used to connect to digit pins of VFD.
23~31 33~59	SEG00 ~ SEG39	Segment output	These pins are used to connect to segment pins of VFD.
17, 18	P0, P1		Output port (static operation)
19	VCC1		Positive power supply for internal logic.
60	VCC2		Positive power supply for high-pressure-resistant output port.
22	VSS		GND
32	VP		Negative power supply for VFD drive.

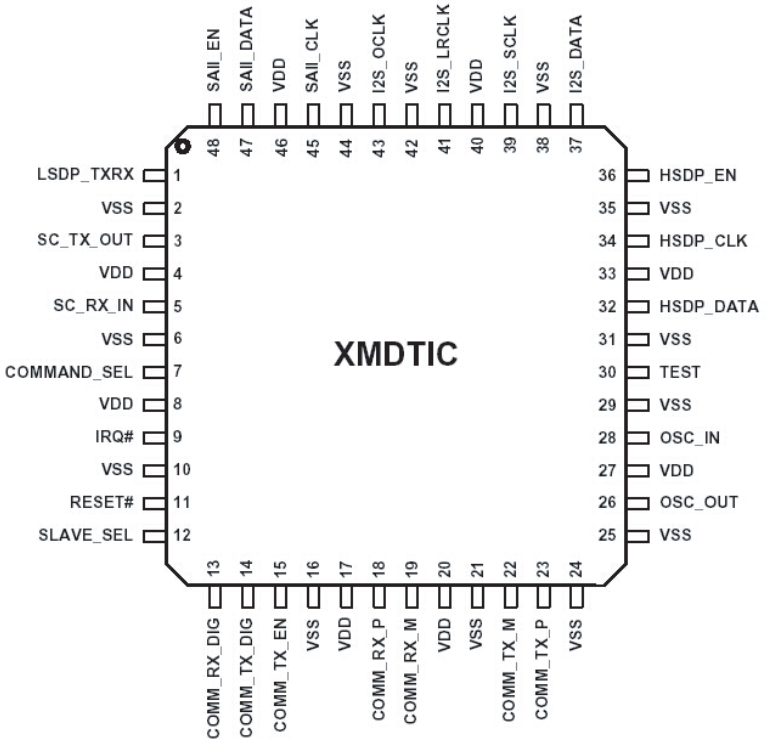
IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS-24

Q2001 : F2602E(XM Digital Transceiver)-1/3

BLOCK DIAGRAM



PIN CONFIGURATION



IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS-25

Q2001 : F2602E(XM Digital Transceiver)-2/3

TERMINAL DESCRIPTION(1/2)

Pin #	Pin Name	Type	Function in Slave Mode	Function in Master Mode	Notes
1	LSDP_TXRX	S=In M=Out	Low Speed Data Port Output	Low Speed Data Port Input	LVTTL S/T
3	SC_TX_OUT	S=Out M=Out	System Controller Bus (CBM) Transmit Data Out	System Controller Bus (CBM) Transmit Data Out	4mA, SLC
5	SC_RX_IN	S=In M=In	System Controller Bus (CBM) Receive Data In	System Controller Bus (CBM) Receive Data In	LVTTL S/T
7	COMMAND_SEL	S=In M=In	Command Mode Select In (1= Command Mode, 0=Normal Mode)	Command Mode Select In (1= Command Mode, 0=Normal Mode)	LVTTL S/T
9	IRQ#	S=Out M=Out	Interrupt Request Out (Active Low)	Interrupt Request Out (Active Low)	4mA Open Drain
11	RESET#	S=In M=In	Asynchronous Reset In, (Active Low)	Asynchronous Reset In, (Active Low)	LVTTL S/T
12	SLAVE_SEL	S=In M=In	M/S Mode Select In (High = Slave Mode)	M/S Mode Select In (Low = Master Mode)	LVTTL S/T
13	COMM_RX_DIG	S=In M=In	DT Comm Bus External Transceiver Receive Data In	DT Comm Bus External Transceiver Receive Data In	LVTTL S/T
14	COMM_TX_DIG	Output	DT Comm Bus External Transceiver Transmit Data Out	DT Comm Bus External Transceiver Transmit Data Out	LVTTL S/T
15	COMM_TX_EN	Output	DT Comm Bus External Transceiver Direction Out (1=Transmit, 0=Receive)	DT Comm Bus External Transceiver Direction Out (1=Transmit, 0=Receive)	LVTTL S/T
18	COMM_RX_P	S=In M=In	DT Comm Bus Internal Receiver Differential Positive In	DT Comm Bus Internal Receiver Differential Positive In	LVDS in+
19	COMM_RX_M	S=In M=In	DT Comm Bus Internal Receiver Differential Negative In	DT Comm Bus Internal Receiver Differential Negative In	LVDS in–
22	COMM_TX_M	Output	DT Comm Bus Internal Transmitter Differential Negative Out	DT Comm Bus Internal Transmitter Differential Negative Out	LVDS out–
23	COMM_TX_P	Output	DT Comm Bus Internal Transmitter Differential Positive Out	DT Comm Bus Internal Transmitter Differential Positive Out	LVDS out+
26	OSC_OUT	Output	Crystal Output	Crystal Output	Crystal Buffer
28	OSC_IN	S=In M=In	Crystal Input	Crystal Input	Crystal Buffer
30	TEST	S=In M=In	Factory Test Mode Select (1=Test, 0= Normal Oper.)	Factory Test Mode Select (1=Test, 0= Normal Oper.)	LVTTL S/T
32	HSDP_DATA	S=In M=Out	High Speed Data Port Data Input	High Speed Data Port Data Output	Out= 4mA, SLC In=LVTTL S/T
34	HSDP_CLK	S=In M=Out	High Speed Data Port Clock Input	High Speed Data Port Clock Output	Out= 4mA, SLC In=LVTTL S/T
36	HSDP_EN	S=Out M=In	High Speed Data Port Enable Output	High Speed Data Port Enable Input	Out= 4mA, SLC In=LVTTL S/T
37	I2S_DATA	S=In M=Out	I2S Digital Port Data In	I2S Digital Audio Port Data Out	Out= 4mA, SLC In=LVTTL S/T

IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS-26

Q2001 : F2602E(XM Digital Transceiver)-3/3

TERMINAL DESCRIPTION(2/2)

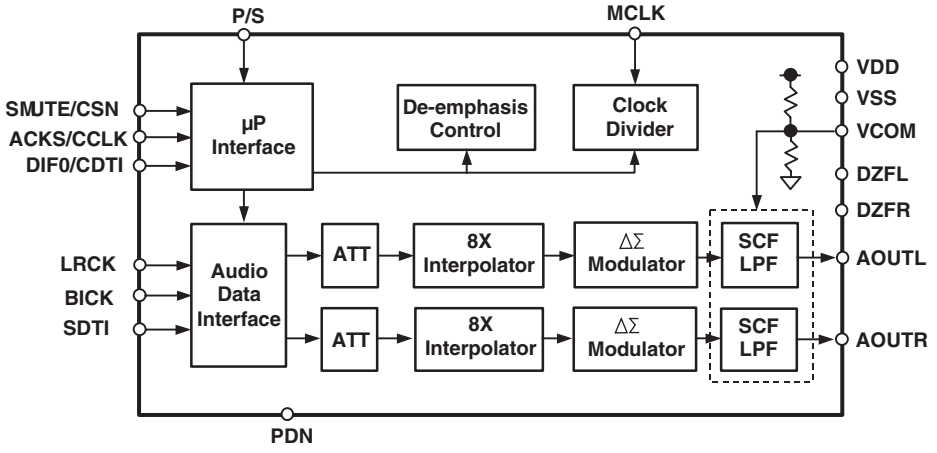
Pin #	Pin Name	Type	Function in Slave Mode	Function in Master Mode	Notes
39	I2S_SCLK	S=In M=Out	I2S Digital Audio Port Bit Clock In	I2S Digital Audio Port Bit Clock Out	Out= 4mA, SLC In=LVTTL S/T
41	I2S_LRCLK	S=In M=Out	I2S Digital Audio Port Left/Right Clock In	I2S Digital Audio Port Left/Right Clock Out	Out= 4mA, SLC In=LVTTL S/T
43	I2S_OCLK	S=In M=Out	I2S Digital Audio Port Oversample Clock (not used - connect to Gnd???)	I2S Digital Audio Port Oversample Clock Out	Out= 4mA, SLC
45	SAII_CLK	S=Out M=In	SAII Port Clock Output	SAII Port Clock Input	Out= 4mA, SLC 3.3V S/T
47	SAII_DATA	S=Out M=In	SAII Port Data Output	SAII Port Data Input	Out= 4mA, SLC In=LVTTL S/T
48	SAII_REQ	S=In M=Out	SAII Port Request Input	SAII Port Request Output	Out= 4mA, SLC In=LVTTL S/T

Pin#	Pin Name	Type	Function in Slave Mode	Function in Master Mode	Notes
4, 8, 17, 20, 27, 33, 40, 46	VDD	PWR	+3.3V Supply Voltage	+3.3V Supply Voltage	
2, 6, 10, 16, 21, 24, 25, 29, 31, 25, 38, 42, 44	VSS	GND	Digital Ground	Digital Ground	

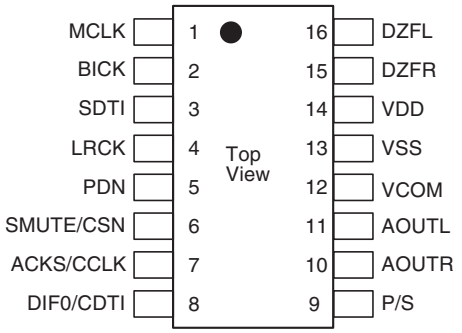
IC BLOCK DIAGRAMS AND TERMINAL DESCRIPTIONS-27

Q2002 : AK4384 (192kHz 24-Bit 2ch DAC)

BLOCK DIAGRAM



PIN CONFIGURATION

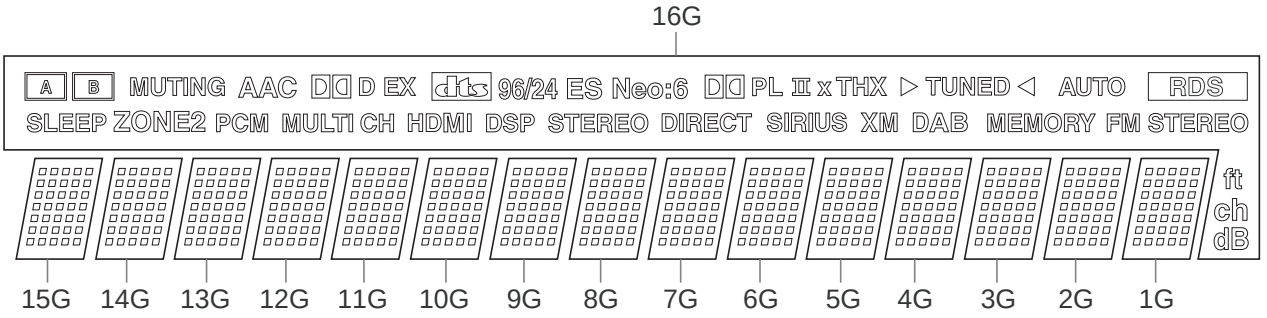


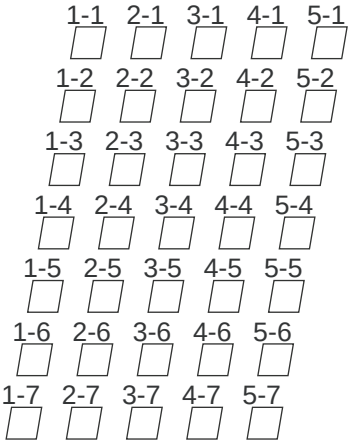
TERMINAL DESCRIPTION

No.	Pin Name	I/O	Function
1	MCLK	I	Master Clock Input Pin An external TTL clock should be input on this pin.
2	BICK	I	Audio Serial Data Clock Pin
3	SDTI	I	Audio Serial Data Input Pin
4	LRCK	I	L/R Clock Pin
5	PDN	I	Power-Down Mode Pin When at “L”, the AK4384 is in the power-down mode and is held in reset. The AK4384 should always be reset upon power-up.
6	SMUTE/ CSN	I I	Soft Mute Pin in parallel mode “H”: Enable, “L”: Disable Chip Select Pin in serial mode
7	ACKS/ CCLK	I I	Auto Setting Mode Pin in parallel mode “L”: Manual Setting Mode, “H”: Auto Setting Mode Control Data Clock Pin in serial mode
8	DIF0/ CDTI	I I	Audio Data Interface Format Pin in parallel mode Control Data Input Pin in serial mode
9	P/S	I	Parallel/Serial Select Pin (Internal pull-up pin) “L”: Serial control mode, “H”: Parallel control mode
10	AOUTR	O	Rch Analog Output Pin
11	AOUTL	O	Lch Analog Output Pin
12	VCOM	O	Common Voltage Pin, VDD/2 Normally connected to VSS with a 0.1mF ceramic capacitor in parallel with a 10mF electrolytic cap.
13	VSS	-	Ground Pin
14	VDD	-	Power Supply Pin
15	DZFR	O	Rch Data Zero Input Detect Pin
16	DZFL	O	Lch Data Zero Input Detect Pin

FL TUBE VIEW

Q7001: 16BT128GNYK


16G
A B MUTING AAC D EX 96/24 ES Neo:6 PL II x THX TUNED AUTO RDS
SLEEP ZONE2 PCM MULTI CH HDMI DSP STEREO DIRECT SIRIUS XM DAB MEMORY FM STEREO
ft
ch
dB
15G 14G 13G 12G 11G 10G 9G 8G 7G 6G 5G 4G 3G 2G 1G



(1G-15G)

	16G	15G-1G
P1	A	1-1
P2	B	2-1
P3	SLEEP	3-1
P4	MUTING	4-1
P5	AAC	5-1
P6	ZONE2	1-2
P7	PCM	2-2
P8	D	3-2
P9	D	4-2
P10	MULTI CH	5-2
P11	EX	1-3
P12	HDMI	2-3
P13	dts	3-3
P14	DSP	4-3
P15	96/24	5-3
P16	ES	1-4
P17	STEREO	2-4
P18	Neo:6	3-4

	16G	15G-1G
P19	DIRECT	4-4
P20	D PL	5-4
P21	II	1-5
P22	x	2-5
P23	SIRIUS	3-5
P24	THX	4-5
P25	XM	5-5
P26	DAB	1-6
P27	▷ ◁	2-6
P28	TUNED	3-6
P29	MEMORY	4-6
P30	AUTO	5-6
P31	FM STEREO	1-7
P32	RDS	2-7
P33	ft	3-7
P34	ch	4-7
P35	dB	5-7

MICROPROCESSOR TERMINAL DESCRIPTIONS-1

Q701 : M30622MWP-B06

Pin No.	Pin Name	I/O	Act.	Description
1	VSWS7	O	H	Output control signal for video sw IC(AN15880)
2	VSWS6	O	H	Output control signal for video sw IC(AN15880)
3	VSWS5	O	*	Y/C Mix control output for video sw IC(AN15880)
4	~VMUT	O	L	Mute control output for video sw IC(AN15880)
5	VSWS3	O	H	V/Y/C select control output for video sw IC(AN15880)
6	VSWS2	O	H	V/Y/C select control output for video sw IC(AN15880)
7	VSWS1	O	H	V/Y/C select control output for video sw IC(AN15880)
8	BYTE	---	---	Select of external bus width. Connect to ground.
9	CNVss	---	---	Select of processor mode.
10	RDSDATA	I	H	RDS data input(PP type)/Not used(other type)
11	VSWS4	O	H	Gain control output for video sw IC(AN15880)
12	~RESET	I	L	Reset input
13	Xout	---	---	Connected to oscillator
14	Vss	---	---	Ground
15	Xin	---	---	Connected to oscillator
16	Vcc1	---	---	Power supply.
17	~NMI	I	L	Not used.
18	POFF	I	L	Power failure detect input
19	VSYNC	I	L	Not used
20	~XMREQERR/~RDSCLK	I	L	XM IC interrupt detect(D type)/RDS clock input(PP type)/Not used(others)
21	XMCOMSEL	O	H	XM IC control output
22	~XMDACRST	O	L	XM DAC reset control output
23	DIRINT0	I	H	DIR(CS42518) unlock detect input
24		I	H	Not used
25	~DSPINT2	I	L	DSP detect input
26	~DSPINT1	I	L	DSP detect input
27	~DSPINT0	I	L	DSP detect input
28	SDET	I	H	S-video detect input
29	VCSCL/PLLSCL	O	CLK	Video encoder/decoder clock output/Tuner unit clock output
30	VCSDA/PLLSCL	I/O	H	Video encoder/decoder data output/Tuner unit data output
31	FTXD	O	H	Writing port of flash microprocessor
32	FRXD	I	H	Writing port of flash microprocessor
33	FCLK	O	CLK	Writing port of flash microprocessor
34	FBUSY	O	H	Writing port of flash microprocessor
35	XMSRTXD	O	H	Data output for XM IC/SIRIUS UART
36	XMSRRXD	I	H	Data input from XM IC/SIRIUS UART
37	~XMRST	O	L	XM IC reset control output
38	~DIRCS	O	L	DIR(CS42518) chip select output
39	~DIRRST	O	L	DIR(CS42518) reset control output
40	~DSPCS	O	L	DSP chip select output
41	~FEPM	I	H	Writing port of flash microprocessor
42	~DSPRST	O	L	Reset control output for DSP
43	DIGCLK	O	CLK	Clock output for DIR(CS42518)
44	DIGSDI	I	H	Data input from DIR(CS42518)
45	DIGSDO	O	H	Data output for DIR(CS42518)
46	~FCE	I	H	Writing port of flash microprocessor
47	AMUT	O	H	Mute control output
48	SPRLB	O	H	Speaker relay(SP-B) control output
49	SPRLSB	O	H	Speaker relay(SB) control output
50	SPRLCS	O	H	Speaker relay(C/S) control output

MICROPROCESSOR TERMINAL DESCRIPTIONS-2
Q701 : M30622MWP-B06

Pin No.	Pin Name	I/O	Act.	Description
51	SPRLF	O	H	Speaker relay(F) control output
52	---	O	H	Not used
53	VOLDAT	O	H	Data output for R2S15211
54	VOLCLK	O	H	Clock output for R2S15211
55	---	O	H	Not used
56	VPOWER	O	H	Not used(D type)/Video power control output
57	APOWER	O	H	Power control output
58	~POFF2	I	L	POFF2 detect input
59	~FANH	O	L	Not used
60	~FANCTRL	O	L	Not used
61	---	O	H	Not used
62	Vcc2	---	---	Power supply.
63	SEC1H	O	H	Power supply control output for power amplifier
64	Vss	---	---	Ground.
65	PROTECT	I	H	Detect input of speaker protect
66	VOLH	I	A/D	Detect input of speaker output voltage level
67	THERMAL	I	A/D	Thermal detect input
68	INIT3	I	A/D	Input for initial setting
69	INIT2	I	A/D	Input for initial setting
70	INIT1	I	A/D	Input for initial setting
71	BAND	I	A/D	Input for tuner frequency setting
72	~SYSOUT	O	L	RI output
73	SYSIN	I	H	RI input
74	---	I	L	Not used
75	~REMIN	I	L	Remote control signal input
76	~STEREO	I	L	FM stereo detect input
77	~SD	I	L	FM/AM tuned detect input
78	HPDET	I	H	Headphone detect input
79	VOLB	I	H	Data input from rotary encoder(Master volume)
80	VOLA	I	H	Data input from rotary encoder(Master volume)
81	---	O	H	Not used
82	---	O	H	Not used
83	---	O	H	Not used
84	~LEDSTBY	O	L	Standby LED control output
85	FLDSDO	O	H	FL driver(M66005) data output
86	FLDCLK	O	CLK	FL driver(M66005) clock output
87	~FLDCS	O	L	FL driver(M66005) chip select output
88	~FLDRST	O	L	FL driver(M66005) reset control output
89	---	I	L	Not used
90	---	I	L	Not used
91	~KEYINT1	I	L	Key interrupt input
92	~KEYINT0	I	L	Key interrupt input
93	KEY3	I	A/D	Key input
94	KEY2	I	A/D	Key input
95	KEY1	I	A/D	Key input
96	AVss	---	---	Ground for A/D converter
97	KEY0	I	A/D	Key input
98	Vref	---	---	Power supply for reference of A/D converter
99	AVcc	---	---	Power supply.
100	~VSWS8	O	L	V1MUT control output for video sw IC(AN15880)

ADJUSTMENT PROCEDURE-1
IDLING CURRENT ADJUSTMENT

[When]

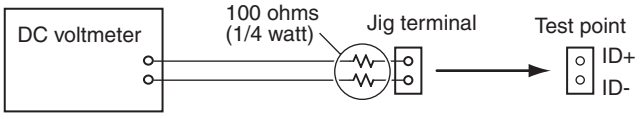
1. Exchange Power transistor (Q6050 - Q6056, Q6060 - Q6066)
2. Exchange Amplifier PC board (NAAF-8779).

[Procedure]

<Note> No load and No signal

Refer to " ADJUSTMENT PROCEDURE-2 " for the adjustment points and the test points.

1. Before idling adjustment, turn the trimming resistors fully to counter clockwise.
2. Connect the dc voltmeter to test points,
   using two 100 ohm resistors between the poles of the jig terminal and the dc voltmeter terminals.



3. Connect the ac power cord to a wall outlet.
4. Press STANDBY/ON button to turn the power on.
5. Adjust the trimming resistors as the following procedure immediately after power on.

Channel	Mark	Adjustment point (Trimming resistor)	Measuring point (Test point)	Adjustment value
Center	C	R6040	P6080	2.5 mV
Front Left	L	R6041	P6081	2.5 mV
Front Right	R	R6042	P6082	2.5 mV
Surround Left	SL	R6043	P6083	1.5 mV
Surround Right	SR	R6044	P6084	1.5 mV
Surround Back Left	SBL	R6045	P6085	1.5 mV
Surround Back Right	SBR	R6046	P6086	1.5 mV

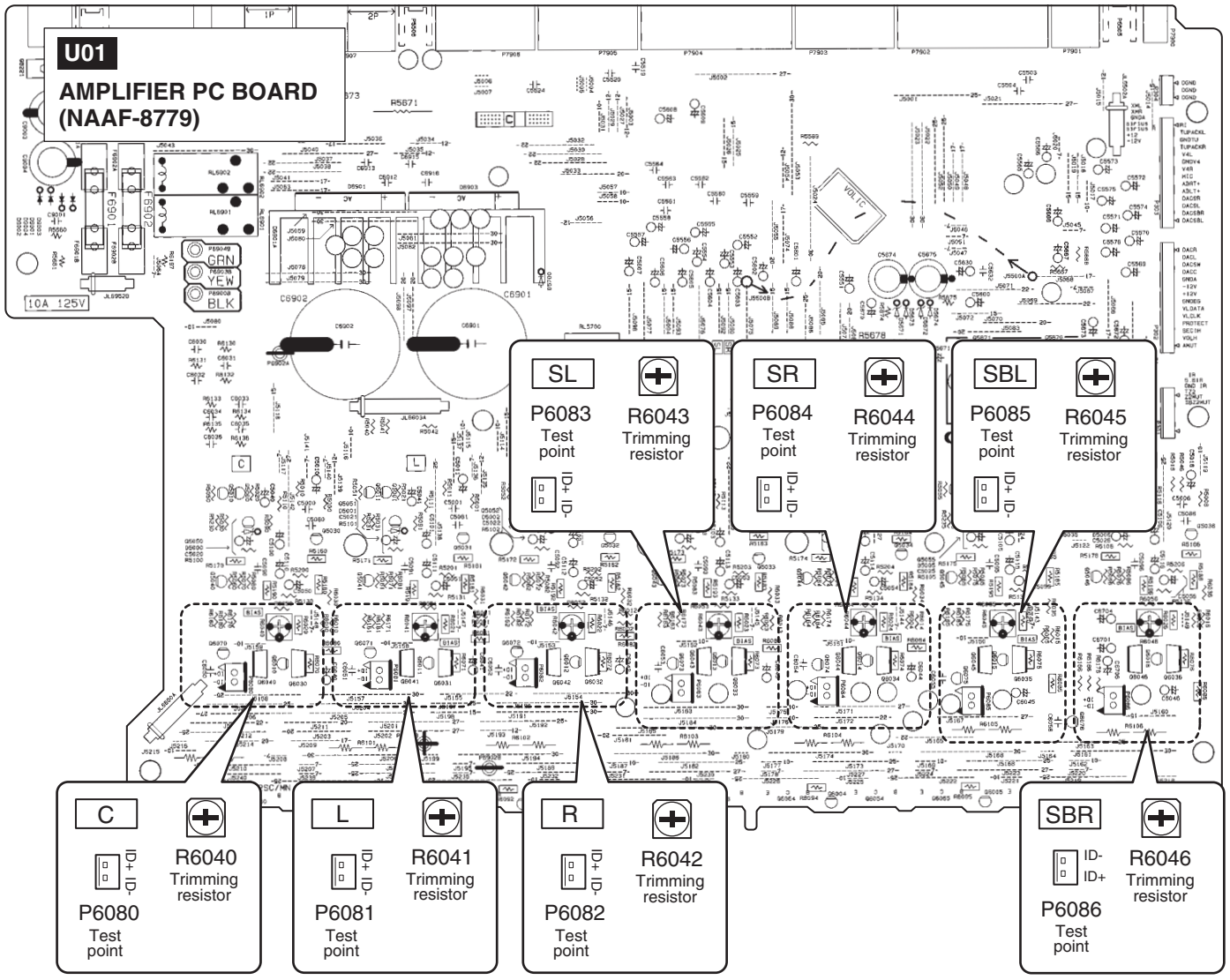
6. Wait for 4 - 6 minutes. (Heat running)
7. Re-adjust the trimming resistors as the following procedure.

Channel	Adjustment point	Measured value → Adjustment value	Specifications (∗In a stable state)
Front Left, Right and Center	R6041, R6042 and R6040	In case below 9 mV → 9 mV In case 9 - 11 mV → Leave it as it is In case over 11 mV → 11 mV	12 +/- 3 mV
Surround Left Surround Right Surround Back Left Surround Back Right	R6043, R6044, R6045 and R6046	In case below 6 mV → 6 mV In case 6 - 8 mV → Leave it as it is In case over 8 mV → 8 mV	9 +/- 3 mV

∗ Idling currents are stabilized in about 10 minutes after power on.

8. Disconnect the dc voltmeter.
9. Press STANDBY/ON button to turn the power off.
10. Disconnect the ac power cord.

ADJUSTMENT PROCEDURE-2
IDLING CURRENT ADJUSTMENT



HT-R540

<Note>

Parts marked by '**NSP**' are generally unavailable because they are not in our Master Spare Parts List.

NOTE : THE COMPONENTS IDENTIFIED BY THE MARK ! ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.

<Notes>

(B) : Black model
(S) : Silver model
<DD> : USA model
<DC> : Canadian model
<PA> : Australian model

EXPLODED VIEW PARTS LIST

	REF. NO.	PART NAME	DESCRIPTION	Q'TY	PART NO. (SN)	REMARKS
EV	A001	F BRACKET	---	1	27111442	(B)
EV	A001	F BRACKET	---	1	27111444	(S)
EV	A002	SCREW	3TTB+8B(3CM)SR	5	801637	
EV	A004	CUSHION	---	1	28141686	
EV	A011	SCREW	3TTB+8B(3CM)SR	3	801637	
EV	A012	SCREW	3TTB+8B(3CM)SR	2	801637	
EV	A013	WIRE TIE	BSK-1	7	260208	
EV	A015	CHASSIS	---	1	---	NSP
EV	A016	SCREW	3TTB+8B(3CM)SR	1	801637	
EV	A017	WIRE TIE	BINDER(CLAMPER)UL	2	260258	
EV	A018	HOLDER	KGLS-22S	1	27190369	
EV	A020	HOLDER	KGLS-16RT	2	27190511	
EV	A021	HOLDER	HOLDER	4	27190991	
EV	A022	HOLDER	KGLS-10RT	1	27190428A	
EV	A024	SCREW	3TTB+8B(3CM)SR	3	801637	
EV	A025	HOLDER	HOLDER	1	27190965	
EV	A027	HOLDER	HOLDER KGLS-18S	1	27190470	
EV	A028	CLIP	CS-1U	1	27255004	
EV	A029	SCREW	3TTB+8B(3CM)SR	1	801637	
EV	A030	SCREW	4TTC+8C(3BC)	4	830440089GR	
EV	A031	SPACER	---	1	27270439	
EV	A033	LABEL	(PT)	1	29363379-1	
EV	A035	HOLDER	KGLS-14RT	1	27190524	
EV	A037	BUSHING	S-RELIEF #2271	1	27300750	!
EV	A040	HEAT SINK	---	1	27160589	
EV	A041	RETAINER	(HL)	1	27142023	
EV	A042	RETAINER	(HR)	1	27142024	
EV	A043	SCREW	3TTB+8B(3CM)SR	4	801637	
EV	A044	TAPE	TAPE(CLOTH-8U)	(1)	29110082	
EV	A045	HOLDER	KGLS-5RT	2	27191156	
EV	A047	SCREW	3TTB+8B(3CM)SR	4	801637	
EV	A048	SCREW	3TTB+8B(3CM)SR	1	801637	
EV	A049	SCREW	3SMS8W.SW+14B(CU)	14	801634	
EV	A050	IB CUSHION	W15 x 3t TAPE	1	28141585	
EV	A051	TAPE	TAPE(CLOTH-16U)	(1)	29110083	
EV	A055	KNOB	(VOL)AS	1	28326289	(B)
EV	A055	KNOB	(VOL)AS	1	28326461	(S)
EV	A060	COVER	(B)	1	28184961	(B)

EV	A060	COVER	(S)	1	28184962	(S)
EV	A061	SCREW	3TTB+8B(3BC)	6	838430088GR	(B)
EV	A061	SCREW	3TTB+8B(3CM)	6	838130088GR	(S)
EV	A062	CUSHION	---	1	28141681	
EV	A063	TAPE	TAPE(CLOTH-16U)	(1)	29110083	
EV	A065	BOTTOM LEG	---	4	27175432A	
EV	A066	CUSHION	---	4	28141664	
EV	A068	SCREW	3TTB+8B(3CM)SR	4	801637	
EV	A069	CUSHION	---	1	28141687	
EV	A070	CLEAR PLT	---	1	28192090A	(B)
EV	A070	CLEAR PLT	---	1	28192091A	(S)
EV	A071	CUSHION	---	2	28141688	
EV	A073	F PANEL	HT-R540(B)MDD	1	27212880	(B), <DD>
EV	A073	F PANEL	HT-R540(B)MDD	1	27212880	(B), <DC>
EV	A073	F PANEL	HT-R540(B)MPA	1	27212882	(B), <PA>
EV	A073	F PANEL	HT-R540(S)MDC	1	27212881	(S), <DC>
EV	A073	F PANEL	HT-R540(S)MPA	1	27212883	(S), <PA>
EV	A077	BADGE	---	1	28135244	(B)
EV	A077	BADGE	---	1	28135298	(S)
EV	A081	FACET	FACET	1	28198778	
EV	A089	SCREW	3TTB+8B(3BC)	3	838430088GR	
EV	A093	REAR PANEL	R540MDD	1	27123550A	<DD, DC>
EV	A093	REAR PANEL	R540MPA	1	27123551A	<PA>
EV	A097	SCREW	3TTB+8B(3BC)	34	838430088GR	<DD, DC>
EV	A097	SCREW	3TTB+8B(3BC)	33	838430088GR	<PA>
EV	A102	LABEL	(COVER)	1	29364123	
EV	A109	LABEL	HOOKUP-ONKYO	1	29363194	<DD, DC>
EV	Q6050	TR	2SC5242-O	1	2202843	
EV	Q6050 or	TR	2SC5242-R	(1)	2202842	
EV	Q6050A	ISO SHEET	AC238	2	223024	
EV	Q6050B	ISO SHEET	ISO SHEET	6	223041	
EV	Q6051	TR	2SC5242-O	1	2202843	!
EV	Q6051 or	TR	2SC5242-R	(1)	2202842	!
EV	Q6052	TR	2SC5242-O	1	2202843	!
EV	Q6052 or	TR	2SC5242-R	(1)	2202842	!
EV	Q6053	TR	2SC5242-O	1	2202843	!
EV	Q6053 or	TR	2SC5242-R	(1)	2202842	!
EV	Q6054	TR	2SC5242-O	1	2202843	!
EV	Q6054 or	TR	2SC5242-R	(1)	2202842	!
EV	Q6055	TR	2SC5242-O	1	2202843	!
EV	Q6055 or	TR	2SC5242-R	(1)	2202842	!
EV	Q6056	TR	2SC5242-O	1	2202843	!
EV	Q6056 or	TR	2SC5242-R	(1)	2202842	!
EV	Q6060	TR	2SA1962-O	1	2202833	!
EV	Q6060 or	TR	2SA1962-R	(1)	2202832	!
EV	Q6061	TR	2SA1962-O	1	2202833	!
EV	Q6061 or	TR	2SA1962-R	(1)	2202832	!
EV	Q6062	TR	2SA1962-O	1	2202833	!
EV	Q6062 or	TR	2SA1962-R	(1)	2202832	!
EV	Q6063	TR	2SA1962-O	1	2202833	!
EV	Q6063 or	TR	2SA1962-R	(1)	2202832	!
EV	Q6064	TR	2SA1962-O	1	2202833	!
EV	Q6064 or	TR	2SA1962-R	(1)	2202832	!
EV	Q6065	TR	2SA1962-O	1	2202833	!
EV	Q6065 or	TR	2SA1962-R	(1)	2202832	!

EV	Q6066	TR	2SA1962-O	1	2202833	!
EV	Q6066 or	TR	2SA1962-R	(1)	2202832	!
EV	**<Note>**					
EV	Must use the same HFE rank mutually about the following parts.					
EV	Ref. No. : Q6051 - Q6061, Q6052 - Q6062, Q6053 - Q6063, Q6054 - Q6064, Q6055 - 6065					
EV	T901	P TRANS	NPT-1517D	1	2301803	!, <DD, DC>
EV	T901	P TRANS	NPT-1517P	1	2301804	!, <PA>
EV	F6901	FUSE	10A-UL/T-233	1	252330GR	!
EV	F6901 or	FUSE	10A-T/UL-ST2	(1)	252333GR	!
EV	F6902	FUSE	10A-UL/T-233	1	252330GR	!
EV	F6902 or	FUSE	10A-T/UL-ST2	(1)	252333GR	!
EV	F901	FUSE	8A-UL/T-233	1	252329GR	!, <DD, DC>
EV	F901 or	FUSE	8A-T/UL-ST2	(1)	252261GR	!, <DD, DC>
EV	F901	FUSE	4A-SE-EAK FUSE	1	252077GR	!, <PA>
EV	F901 or	FUSE	4A-SE-TL250V	(1)	252277GR	!, <PA>
EV	F901C	LABEL	T4AL250V	1	29361732A	! ,<PA>
EV	F903	FUSE	5A-UL/T-233	1	252326GR	!, <DD, DC>
EV	F903 or	FUSE	5A-T/UL-ST2	(1)	252258GR	!, <DD, DC>
EV	F903	FUSE	2.5A-SE-EAK FUSE	1	252075GR	!, <PA>
EV	F903 or	FUSE	2.5A-SE-TL250V	(1)	252275GR	!, <PA>
EV	F903C	LABEL	T2.5AL250V	1	29361747	!, <PA>
EV	P101	FFC	NCFC7-131012	1	2047131012	
EV	P6601A	P RIVET	JB-407A-C	6	880052	
EV	P6602A	P RIVET	JB-407A-C	8	880052	
EV	P701	FFC	NCFC3-26020	1	204326020	
EV	P901	AC CORD	AS-UC-2	1	253333VOL	!, <DD, DC>
EV	P901 or	AC CORD	AS-UC-2	(1)	253368LTK	!, <DD, DC>
EV	P901 or	AC CORD	AS-UC-2	(1)	253368YUN	!, <DD, DC>
EV	P901	AC CORD	AS-SAA	1	253388LTK	!, <PA>
EV	P901 or	AC CORD	AS-SAA	(1)	253388FJK	!, <PA>
EV	P901 or	AC CORD	AS-SAA	(1)	253388LON	!, <PA>
EV	U01	AMPLIFIER PC board ass'y	NAAF-8779-1C	1	1B126579-1C	<DD, DC>
EV	U01	AMPLIFIER PC board ass'y	NAAF-8779-1L	1	1B126579-1L	<PA>
EV	U02	TRANS SEC. TERMINAL PC board ass'y	NAPS-8780-1C	1	1B126580-1C	<DD, DC>
EV	U02	TRANS SEC. TERMINAL PC board ass'y	NAPS-8780-1L	1	1B126580-1L	<PA>
EV	U03	TERMINAL SENSOR PC board ass'y	NAETC-8781-1C	1	1B126581-1C	NSP, <DD, DC>
EV	U03	TERMINAL SENSOR PC board ass'y	NAETC-8781-1L	1	1B126581-1L	NSP, <PA>
EV	U04	HOLDER PC board ass'y	NAETC-8782-1C	1	1B126582-1C	NSP
EV	U05	DISPLAY PC board ass'y	NADIS-8785-1A	1	1B126585-1A	<DD, DC>
EV	U05	DISPLAY PC board ass'y	NADIS-8785-1B	1	1B126585-1B	<PA>
EV	U06	SWITCH PC board ass'y	NADIS-8786-1A	1	1B126586-1A	<DD, DC>
EV	U06	SWITCH PC board ass'y	NADIS-8786-1B	1	1B126586-1B	<PA>
EV	U07	POWER SUPPLY PC board ass'y	NAPS-8787-1A	1	1B126587-1A	<DD, DC>
EV	U07	POWER SUPPLY PC board ass'y	NAPS-8787-1B	1	1B126587-1B	<PA>
EV	U08	TRANS SEC. TERMINAL PC board ass'y	NAETC-8788-1A	1	1B126588-1A	NSP, <DD, DC>
EV	U08	TRANS SEC. TERMINAL PC board ass'y	NAETC-8788-1B	1	1B126588-1B	NSP, <PA>
EV	U10	HEADPHONE JACK PC board ass'y	NAETC-8790-1A	1	1B126590-1A	NSP, <DD, DC>
EV	U10	HEADPHONE JACK PC board ass'y	NAETC-8790-1B	1	1B126590-1B	NSP, <PA>
EV	U16	HOLDER PC board ass'y	NAETC-8796-1A	1	1B126596-1A	NSP
EV	U17	HOLDER PC board ass'y	NAETC-8797-1A	1	1B126597-1A	NSP
EV	U18	DSP & MICROPROCESSOR PC board ass'y	NADG-8798-1E	1	1B126598-1E	<DD, DC>
EV	U18	DSP & MICROPROCESSOR PC board ass'y	NADG-8798-1F	1	1B126598-1F	<PA>
EV	U19	XM DIGITAL TRANSCEIVER PC board ass'y	NADG-8799-1E	1	1B126599-1E	<DD, DC>
EV	U20	VIDEO & SPEAKER TERMINAL PC board ass'y	NAVD-8804-1A	1	1B126504-1A	<DD, DC>
EV	U20	VIDEO & SPEAKER TERMINAL PC board ass'y	NAVD-8804-1C	1	1B126504-1C	<PA>

EV	U21	TUNER UNIT	ENG06507QFUS	1	240156	<DD, DC>
EV	U21 or	TUNER UNIT	FAE385-A11US	(1)	240152	<DD, DC>
EV	U21	TUNER UNIT	ENG07506QFEX	1	240159	<PA>
EV	U21 or	TUNER UNIT	FAE485-E12EX	(1)	240155	<PA>

HT-R540

PC BOARD PARTS LIST

PCB1 **U01** AMPLIFIER PC BOARD (NAAF-8779-1C/ 1L)
PCB1 **U02** TRANS SEC. TERMINAL PC BOARD (NAPS-8780-1C/ 1L)
PCB1 **U03** THERMAL SENSOR PC BOARD (NAETC-8781-1C/ 1L)
PCB1

	CIRCUIT NO.	PART NAME	DESCRIPTION	Q'TY	PART NO. (SN)	REMARKS
PCB1	Q5501	IC	R2S15211FP	1	22242297R3	
PCB1	Q5503	IC	NJM4580M-D	1	22241448R2	
PCB1	Q5630	IC	NJM4580M-D	1	22241448R2	
PCB1	Q5670	IC	78M12HF(NJM78M12FA)	1	222780125JRC	
PCB1	Q5670 or	IC	78M12HF(MPC78M12HF)	(1)	222780125NEC	
PCB1	Q5670 or	IC	78M12(AN78M12F)	(1)	222780125MAT	
PCB1	Q5670A	HEAT-SINK	HEAT-SINK(RAD-68)	1	27160211	
PCB1	Q5670B	SCREW	3P+10FN(3BC)	1	82143010GR	
PCB1	Q5671	IC	79M12HF(NJM79M12FA)	1	222790125JRC	
PCB1	Q5671 or	IC	79M12HF(MPC79M12HF)	(1)	222790125NEC	
PCB1	Q5671 or	IC	79M12F(AN79M12F)	(1)	222790125MAT	
PCB1	Q5671A	HEAT-SINK	HEAT-SINK(RAD-68)	1	27160211	
PCB1	Q5671B	SCREW	3P+10FN(3BC)	1	82143010GR	
PCB1	Q6380	IC	LM61CIZ	1	22242212	
PCB1	Q5000	TR	2SC2240-BL(TPE2_F)	1	2211406	
PCB1	Q5001	TR	2SC2240-BL(TPE2_F)	1	2211406	
PCB1	Q5002	TR	2SC2240-BL(TPE2_F)	1	2211406	
PCB1	Q5003	TR	2SC2240-BL(TPE2_F)	1	2211406	
PCB1	Q5004	TR	2SC2240-BL(TPE2_F)	1	2211406	
PCB1	Q5005	TR	2SC2240-BL(TPE2_F)	1	2211406	
PCB1	Q5006	TR	2SC2240-BL(TPE2_F)	1	2211406	
PCB1	Q5010	TR	2SC2240-BL(TPE2_F)	1	2211406	
PCB1	Q5011	TR	2SC2240-BL(TPE2_F)	1	2211406	
PCB1	Q5012	TR	2SC2240-BL(TPE2_F)	1	2211406	
PCB1	Q5013	TR	2SC2240-BL(TPE2_F)	1	2211406	
PCB1	Q5014	TR	2SC2240-BL(TPE2_F)	1	2211406	
PCB1	Q5015	TR	2SC2240-BL(TPE2_F)	1	2211406	
PCB1	Q5016	TR	2SC2240-BL(TPE2_F)	1	2211406	
PCB1	Q5030	TR	2SA949-Y(TPE6_F)	1	2211354	
PCB1	Q5031	TR	2SA949-Y(TPE6_F)	1	2211354	
PCB1	Q5032	TR	2SA949-Y(TPE6_F)	1	2211354	
PCB1	Q5033	TR	2SA949-Y(TPE6_F)	1	2211354	
PCB1	Q5034	TR	2SA949-Y(TPE6_F)	1	2211354	
PCB1	Q5035	TR	2SA949-Y(TPE6_F)	1	2211354	
PCB1	Q5036	TR	2SA949-Y(TPE6_F)	1	2211354	
PCB1	Q5040	TR	2SC2229-Y(TPE6_F)	1	2211634	
PCB1	Q5041	TR	2SC2229-Y(TPE6_F)	1	2211634	
PCB1	Q5042	TR	2SC2229-Y(TPE6_F)	1	2211634	
PCB1	Q5043	TR	2SC2229-Y(TPE6_F)	1	2211634	
PCB1	Q5044	TR	2SC2229-Y(TPE6_F)	1	2211634	
PCB1	Q5045	TR	2SC2229-Y(TPE6_F)	1	2211634	
PCB1	Q5046	TR	2SC2229-Y(TPE6_F)	1	2211634	

PCB1	Q5050	TR	2SC2240-BL(TPE2_F)	1	2211406
PCB1	Q5050 or	TR	2SC2240-GR	(1)	2211405
PCB1	Q5051	TR	2SC2240-BL(TPE2_F)	1	2211406
PCB1	Q5051 or	TR	2SC2240-GR	(1)	2211405
PCB1	Q5052	TR	2SC2240-BL(TPE2_F)	1	2211406
PCB1	Q5052 or	TR	2SC2240-GR	(1)	2211405
PCB1	Q5053	TR	2SC2240-BL(TPE2_F)	1	2211406
PCB1	Q5053 or	TR	2SC2240-GR	(1)	2211405
PCB1	Q5054	TR	2SC2240-BL(TPE2_F)	1	2211406
PCB1	Q5054 or	TR	2SC2240-GR	(1)	2211405
PCB1	Q5055	TR	2SC2240-BL(TPE2_F)	1	2211406
PCB1	Q5055 or	TR	2SC2240-GR	(1)	2211405
PCB1	Q5056	TR	2SC2240-BL(TPE2_F)	1	2211406
PCB1	Q5056 or	TR	2SC2240-GR	(1)	2211405
PCB1	Q5600	TR	RN1441	1	2215410R2
PCB1	Q5601	TR	RN1441	1	2215410R2
PCB1	Q5602	TR	RN1441	1	2215410R2
PCB1	Q5603	TR	RN1441	1	2215410R2
PCB1	Q5604	TR	RN1441	1	2215410R2
PCB1	Q5605	TR	RN1441	1	2215410R2
PCB1	Q5606	TR	RN1441	1	2215410R2
PCB1	Q5607	TR	RN1441	1	2215410R2
PCB1	Q5610	TR	RN1441	1	2215410R2
PCB1	Q6000	TR	2SC1740S-S	1	2213285
PCB1	Q6001	TR	2SC1740S-S	1	2213285
PCB1	Q6002	TR	2SC1740S-S	1	2213285
PCB1	Q6003	TR	2SC1740S-S	1	2213285
PCB1	Q6004	TR	2SC1740S-S	1	2213285
PCB1	Q6005	TR	2SC1740S-S	1	2213285
PCB1	Q6006	TR	2SC1740S-S	1	2213285
PCB1	Q6010	TR	2SC1740S-S	1	2213285
PCB1	Q6011	TR	2SC1740S-S	1	2213285
PCB1	Q6012	TR	2SC1740S-S	1	2213285
PCB1	Q6013	TR	2SC1740S-S	1	2213285
PCB1	Q6014	TR	2SC1740S-S	1	2213285
PCB1	Q6015	TR	2SC1740S-S	1	2213285
PCB1	Q6016	TR	2SC1740S-S	1	2213285
PCB1	Q6030	TR	2SC5171(ONK_Q)	1	2203010
PCB1	Q6030 or	TR	2SC5993-Q_P	(1)	2217161
PCB1	Q6031	TR	2SC5171(ONK_Q)	1	2203010
PCB1	Q6031 or	TR	2SC5993-Q_P	(1)	2217161
PCB1	Q6032	TR	2SC5171(ONK_Q)	1	2203010
PCB1	Q6032 or	TR	2SC5993-Q_P	(1)	2217161
PCB1	Q6033	TR	2SC5171(ONK_Q)	1	2203010
PCB1	Q6033 or	TR	KTD2061-Y	(1)	2203434
PCB1	Q6034	TR	2SC5171(ONK_Q)	1	2203010
PCB1	Q6034 or	TR	KTD2061-Y	(1)	2203434
PCB1	Q6035	TR	2SC5171(ONK_Q)	1	2203010
PCB1	Q6035 or	TR	KTD2061-Y	(1)	2203434
PCB1	Q6036	TR	2SC5171(ONK_Q)	1	2203010
PCB1	Q6036 or	TR	KTD2061-Y	(1)	2203434
PCB1	Q6040	TR	2SA1930(ONK_Q)	1	2203000
PCB1	Q6040 or	TR	2SA2140-Q_P	(1)	2217151
PCB1	Q6041	TR	2SA1930(ONK_Q)	1	2203000
PCB1	Q6041 or	TR	2SA2140-Q_P	(1)	2217151

PCB1	Q6042	TR	2SA1930(ONK_Q)	1	2203000
PCB1	Q6042 or	TR	2SA2140-Q_P	(1)	2217151
PCB1	Q6043	TR	2SA1930(ONK_Q)	1	2203000
PCB1	Q6043 or	TR	KTB1369-Y	(1)	2203424
PCB1	Q6044	TR	2SA1930(ONK_Q)	1	2203000
PCB1	Q6044 or	TR	KTB1369-Y	(1)	2203424
PCB1	Q6045	TR	2SA1930(ONK_Q)	1	2203000
PCB1	Q6045 or	TR	KTB1369-Y	(1)	2203424
PCB1	Q6046	TR	2SA1930(ONK_Q)	1	2203000
PCB1	Q6046 or	TR	KTB1369-Y	(1)	2203424
PCB1	Q6070	TR	2SC2240-BL(TPE2_F)	1	2211406
PCB1	Q6070 or	TR	2SC2240-GR	(1)	2211405
PCB1	Q6071	TR	2SC2240-BL(TPE2_F)	1	2211406
PCB1	Q6071 or	TR	2SC2240-GR	(1)	2211405
PCB1	Q6072	TR	2SC2240-BL(TPE2_F)	1	2211406
PCB1	Q6072 or	TR	2SC2240-GR	(1)	2211405
PCB1	Q6073	TR	2SC2240-BL(TPE2_F)	1	2211406
PCB1	Q6073 or	TR	2SC2240-GR	(1)	2211405
PCB1	Q6074	TR	2SC2240-BL(TPE2_F)	1	2211406
PCB1	Q6074 or	TR	2SC2240-GR	(1)	2211405
PCB1	Q6075	TR	2SC2240-BL(TPE2_F)	1	2211406
PCB1	Q6075 or	TR	2SC2240-GR	(1)	2211405
PCB1	Q6076	TR	2SC2240-BL(TPE2_F)	1	2211406
PCB1	Q6076 or	TR	2SC2240-GR	(1)	2211405
PCB1	Q6380A	RETAINER	(PTH)	1	27141884-1
PCB1	Q6701	TR	2SC2712-GR	1	2213145R2
PCB1	Q6701 or	TR	KTC3875-GR	(1)	2216175R2
PCB1	Q6702	TR	2SC2712-GR	1	2213145R2
PCB1	Q6702 or	TR	KTC3875-GR	(1)	2216175R2
PCB1	Q6703	TR	2SA1163-BL(TE85L_F)	1	2216756R2
PCB1	Q6707	TR	2SC2712-GR	1	2213145R2
PCB1	Q6707 or	TR	KTC3875-GR	(1)	2216175R2
PCB1	D5000	ZENER D	DZ-5.6BSB	1	224850562
PCB1	D5000 or	ZENER D	MTZJ5.6B	(1)	224470562
PCB1	D5001	ZENER D	DZ-5.6BSB	1	224850562
PCB1	D5001 or	ZENER D	MTZJ5.6B	(1)	224470562
PCB1	D5002	ZENER D	DZ-5.6BSB	1	224850562
PCB1	D5002 or	ZENER D	MTZJ5.6B	(1)	224470562
PCB1	D5003	ZENER D	DZ-5.6BSB	1	224850562
PCB1	D5003 or	ZENER D	MTZJ5.6B	(1)	224470562
PCB1	D5004	ZENER D	DZ-5.6BSB	1	224850562
PCB1	D5004 or	ZENER D	MTZJ5.6B	(1)	224470562
PCB1	D5005	ZENER D	DZ-5.6BSB	1	224850562
PCB1	D5005 or	ZENER D	MTZJ5.6B	(1)	224470562
PCB1	D5006	ZENER D	DZ-5.6BSB	1	224850562
PCB1	D5006 or	ZENER D	MTZJ5.6B	(1)	224470562
PCB1	D5671	ZENER D	DZ-6.2BSC	1	224850623
PCB1	D5671 or	ZENER D	MTZJ6.2C	(1)	224470623
PCB1	D5672	ZENER D	DZ-6.2BSC	1	224850623
PCB1	D5672 or	ZENER D	MTZJ6.2C	(1)	224470623
PCB1	D5673	DIODE	1SS133(DS)	1	223280
PCB1	D5673 or	DIODE	1SS133	(1)	223163
PCB1	D5674	DIODE	1SS133(DS)	1	223280
PCB1	D5674 or	DIODE	1SS133	(1)	223163
PCB1	D5708	C-DIODE	1SS352	1	223234R2

PCB1	D5708 or	C-DIODE	KDS4148U	(1)	223283R2
PCB1	D5708 or	C-DIODE	1SS355	(1)	223269R2
PCB1	D5718	C-DIODE	1SS352	1	223234R2
PCB1	D5718 or	C-DIODE	KDS4148U	(1)	223283R2
PCB1	D5718 or	C-DIODE	1SS355	(1)	223269R2
PCB1	D6000	C-DIODE	1SS352	1	223234R2
PCB1	D6000 or	C-DIODE	KDS4148U	(1)	223283R2
PCB1	D6000 or	C-DIODE	1SS355	(1)	223269R2
PCB1	D6001	C-DIODE	1SS352	1	223234R2
PCB1	D6001 or	C-DIODE	KDS4148U	(1)	223283R2
PCB1	D6001 or	C-DIODE	1SS355	(1)	223269R2
PCB1	D6002	C-DIODE	1SS352	1	223234R2
PCB1	D6002 or	C-DIODE	KDS4148U	(1)	223283R2
PCB1	D6002 or	C-DIODE	1SS355	(1)	223269R2
PCB1	D6003	C-DIODE	1SS352	1	223234R2
PCB1	D6003 or	C-DIODE	KDS4148U	(1)	223283R2
PCB1	D6003 or	C-DIODE	1SS355	(1)	223269R2
PCB1	D6004	C-DIODE	1SS352	1	223234R2
PCB1	D6004 or	C-DIODE	KDS4148U	(1)	223283R2
PCB1	D6004 or	C-DIODE	1SS355	(1)	223269R2
PCB1	D6005	C-DIODE	1SS352	1	223234R2
PCB1	D6005 or	C-DIODE	KDS4148U	(1)	223283R2
PCB1	D6005 or	C-DIODE	1SS355	(1)	223269R2
PCB1	D6006	C-DIODE	1SS352	1	223234R2
PCB1	D6006 or	C-DIODE	KDS4148U	(1)	223283R2
PCB1	D6006 or	C-DIODE	1SS355	(1)	223269R2
PCB1	D6010	C-DIODE	1SS352	1	223234R2
PCB1	D6010 or	C-DIODE	KDS4148U	(1)	223283R2
PCB1	D6010 or	C-DIODE	1SS355	(1)	223269R2
PCB1	D6011	C-DIODE	1SS352	1	223234R2
PCB1	D6011 or	C-DIODE	KDS4148U	(1)	223283R2
PCB1	D6011 or	C-DIODE	1SS355	(1)	223269R2
PCB1	D6012	C-DIODE	1SS352	1	223234R2
PCB1	D6012 or	C-DIODE	KDS4148U	(1)	223283R2
PCB1	D6012 or	C-DIODE	1SS355	(1)	223269R2
PCB1	D6013	C-DIODE	1SS352	1	223234R2
PCB1	D6013 or	C-DIODE	KDS4148U	(1)	223283R2
PCB1	D6013 or	C-DIODE	1SS355	(1)	223269R2
PCB1	D6014	C-DIODE	1SS352	1	223234R2
PCB1	D6014 or	C-DIODE	KDS4148U	(1)	223283R2
PCB1	D6014 or	C-DIODE	1SS355	(1)	223269R2
PCB1	D6015	C-DIODE	1SS352	1	223234R2
PCB1	D6015 or	C-DIODE	KDS4148U	(1)	223283R2
PCB1	D6015 or	C-DIODE	1SS355	(1)	223269R2
PCB1	D6016	C-DIODE	1SS352	1	223234R2
PCB1	D6016 or	C-DIODE	KDS4148U	(1)	223283R2
PCB1	D6016 or	C-DIODE	1SS355	(1)	223269R2
PCB1	D6701	C-DIODE	1SS352	1	223234R2
PCB1	D6701 or	C-DIODE	KDS4148U	(1)	223283R2
PCB1	D6701 or	C-DIODE	1SS355	(1)	223269R2
PCB1	D6702	C-DIODE	1SS352	1	223234R2
PCB1	D6702 or	C-DIODE	KDS4148U	(1)	223283R2
PCB1	D6702 or	C-DIODE	1SS355	(1)	223269R2
PCB1	D6703	ZENER D	UDZS5.1B	1	224550510R2
PCB1	D6704	ZENER D	UDZS5.1B	1	224550510R2

PCB1	D6901	DIODE	D10XB60H	1	22380337
PCB1	D6901A	HEAT SINK	RAD-196	1	27160545
PCB1	D6901C	SCREW	3P+10FN(3BC)	2	82143010GR
PCB1	D6902	C-DIODE	1SS352	1	223234R2
PCB1	D6902 or	C-DIODE	KDS4148U	(1)	223283R2
PCB1	D6902 or	C-DIODE	1SS355	(1)	223269R2
PCB1	D6903	DIODE	D10XB60H	1	22380337
PCB1	D9001	DIODE	RL1N4003	1	22380260
PCB1	D9001 or	DIODE	GP104003E	(1)	22380035
PCB1	D9002	DIODE	RL1N4003	1	22380260
PCB1	D9002 or	DIODE	GP104003E	(1)	22380035
PCB1	D9003	DIODE	RL1N4003	1	22380260
PCB1	D9003 or	DIODE	GP104003E	(1)	22380035
PCB1	D9004	DIODE	RL1N4003	1	22380260
PCB1	D9004 or	DIODE	GP104003E	(1)	22380035
PCB1	C5000	TF C	ECQ-B50V-221K	1	374722215
PCB1	C5001	TF C	ECQ-B50V-221K	1	374722215
PCB1	C5002	TF C	ECQ-B50V-221K	1	374722215
PCB1	C5003	TF C	ECQ-B50V-221K	1	374722215
PCB1	C5004	TF C	ECQ-B50V-221K	1	374722215
PCB1	C5005	TF C	ECQ-B50V-221K	1	374722215
PCB1	C5006	TF C	ECQ-B50V-221K	1	374722215
PCB1	C5010	VX C	CE04W50V-47M(VX)	1	393384707
PCB1	C5011	VX C	CE04W50V-47M(VX)	1	393384707
PCB1	C5012	VX C	CE04W50V-47M(VX)	1	393384707
PCB1	C5013	VX C	CE04W50V-47M(VX)	1	393384707
PCB1	C5014	VX C	CE04W50V-47M(VX)	1	393384707
PCB1	C5015	VX C	CE04W50V-47M(VX)	1	393384707
PCB1	C5016	VX C	CE04W50V-47M(VX)	1	393384707
PCB1	C5020	VX C	CE04W50V-10M(VX)	1	393381007
PCB1	C5021	VX C	CE04W50V-10M(VX)	1	393381007
PCB1	C5022	VX C	CE04W50V-10M(VX)	1	393381007
PCB1	C5023	VX C	CE04W50V-10M(VX)	1	393381007
PCB1	C5024	VX C	CE04W50V-10M(VX)	1	393381007
PCB1	C5025	VX C	CE04W50V-10M(VX)	1	393381007
PCB1	C5026	VX C	CE04W50V-10M(VX)	1	393381007
PCB1	C5040	VX C	CE04W25V-220M(VX)	1	393352217
PCB1	C5041	VX C	CE04W25V-220M(VX)	1	393352217
PCB1	C5042	VX C	CE04W25V-220M(VX)	1	393352217
PCB1	C5043	VX C	CE04W25V-220M(VX)	1	393352217
PCB1	C5044	VX C	CE04W25V-220M(VX)	1	393352217
PCB1	C5045	VX C	CE04W25V-220M(VX)	1	393352217
PCB1	C5046	VX C	CE04W25V-220M(VX)	1	393352217
PCB1	C5050	VX C	CE04W50V-47M(VX)	1	393384707
PCB1	C5051	VX C	CE04W50V-47M(VX)	1	393384707
PCB1	C5052	VX C	CE04W50V-47M(VX)	1	393384707
PCB1	C5053	VX C	CE04W50V-47M(VX)	1	393384707
PCB1	C5054	VX C	CE04W50V-47M(VX)	1	393384707
PCB1	C5055	VX C	CE04W50V-47M(VX)	1	393384707
PCB1	C5056	VX C	CE04W50V-47M(VX)	1	393384707
PCB1	C5080	CERA C	CC45SL50V-040D	1	345020402
PCB1	C5081	CERA C	CC45SL50V-040D	1	345020402
PCB1	C5082	CERA C	CC45SL50V-040D	1	345020402
PCB1	C5083	CERA C	CC45SL50V-040D	1	345020402
PCB1	C5084	CERA C	CC45SL50V-040D	1	345020402

PCB1	C5085	CERA C	CC45SL50V-040D	1	345020402	
PCB1	C5086	CERA C	CC45SL50V-040D	1	345020402	
PCB1	C5090	TF C	ECQ-B50V-101K	1	374721015	
PCB1	C5091	TF C	ECQ-B50V-101K	1	374721015	
PCB1	C5092	TF C	ECQ-B50V-101K	1	374721015	
PCB1	C5093	TF C	ECQ-B50V-101K	1	374721015	
PCB1	C5094	TF C	ECQ-B50V-101K	1	374721015	
PCB1	C5095	TF C	ECQ-B50V-101K	1	374721015	
PCB1	C5096	TF C	ECQ-B50V-101K	1	374721015	
PCB1	C5100	VR C	CE04W100V-22M(VR)	1	394692207	
PCB1	C5101	VR C	CE04W100V-22M(VR)	1	394692207	
PCB1	C5102	VR C	CE04W100V-22M(VR)	1	394692207	
PCB1	C5103	VR C	CE04W100V-22M(VR)	1	394692207	
PCB1	C5104	VR C	CE04W100V-22M(VR)	1	394692207	
PCB1	C5105	VR C	CE04W100V-22M(VR)	1	394692207	
PCB1	C5106	VR C	CE04W100V-22M(VR)	1	394692207	
PCB1	C5110	VR C	CE04W100V-22M(VR)	1	394692207	
PCB1	C5111	VR C	CE04W100V-22M(VR)	1	394692207	
PCB1	C5112	VR C	CE04W100V-22M(VR)	1	394692207	
PCB1	C5113	VR C	CE04W100V-22M(VR)	1	394692207	
PCB1	C5114	VR C	CE04W100V-22M(VR)	1	394692207	
PCB1	C5115	VR C	CE04W100V-22M(VR)	1	394692207	
PCB1	C5116	VR C	CE04W100V-22M(VR)	1	394692207	
PCB1	C5503	TF C	ECQ-B50V-221K	1	374722215	
PCB1	C5504	TF C	ECQ-B50V-221K	1	374722215	
PCB1	C5507	C-CERA C	CC725CH1H-221J1	1	342102214R1	
PCB1	C5508	C-CERA C	CC725CH1H-221J1	1	342102214R1	
PCB1	C5513	C-CERA C	CC725CH1H-221J1	1	342102214R1	
PCB1	C5514	C-CERA C	CC725CH1H-221J1	1	342102214R1	
PCB1	C5517	C-CERA C	CC725CH1H-221J1	1	342102214R1	
PCB1	C5518	C-CERA C	CC725CH1H-221J1	1	342102214R1	
PCB1	C5519	TF C	ECQ-B50V-221K	1	374722215	
PCB1	C5520	TF C	ECQ-B50V-221K	1	374722215	
PCB1	C5521	C-CERA C	CC725CH1H-221J1	1	342102214R1	
PCB1	C5522	C-CERA C	CC725CH1H-221J1	1	342102214R1	
PCB1	C5523	C-CERA C	CC725CH1H-221J1	1	342102214R1	
PCB1	C5524	TF C	ECQ-B50V-221K	1	374722215	
PCB1	C5525	C-CERA C	CC725CH1H-221J1	1	342102214R1	
PCB1	C5526	C-CERA C	CC725CH1H-221J1	1	342102214R1	
PCB1	C5551	VX C	CE04W25V-47M(VX)	1	393354707	
PCB1	C5552	VX C	CE04W25V-47M(VX)	1	393354707	
PCB1	C5553	VX C	CE04W25V-47M(VX)	1	393354707	
PCB1	C5554	VX C	CE04W25V-47M(VX)	1	393354707	
PCB1	C5555	VX C	CE04W25V-47M(VX)	1	393354707	
PCB1	C5556	VX C	CE04W25V-47M(VX)	1	393354707	
PCB1	C5557	VX C	CE04W25V-47M(VX)	1	393354707	
PCB1	C5558	VX C	CE04W25V-47M(VX)	1	393354707	
PCB1	C5559	TF C	ECQ-V50V-474J	1	374724744	
PCB1	C5560	TF C	ECQ-V50V-823J	1	374728234	
PCB1	C5561	TF C	ECQ-B50V-223J	1	374722234	
PCB1	C5562	TF C	ECQ-V50V-474J	1	374724744	
PCB1	C5563	TF C	ECQ-V50V-823J	1	374728234	
PCB1	C5564	TF C	ECQ-B50V-223J	1	374722234	
PCB1	C5565	VX C	CE04W25V-47M(VX)	1	393354707	
PCB1	C5566	VX C	CE04W25V-47M(VX)	1	393354707	

PCB1	C5569	VX C	CE04W50V-47M(VX)	1	393384707
PCB1	C5570	VX C	CE04W50V-47M(VX)	1	393384707
PCB1	C5571	VX C	CE04W50V-47M(VX)	1	393384707
PCB1	C5572	VX C	CE04W50V-47M(VX)	1	393384707
PCB1	C5573	VX C	CE04W50V-47M(VX)	1	393384707
PCB1	C5574	VX C	CE04W50V-47M(VX)	1	393384707
PCB1	C5575	VX C	CE04W50V-47M(VX)	1	393384707
PCB1	C5576	VX C	CE04W50V-47M(VX)	1	393384707
PCB1	C5590	C-CERA C	CC725CH1H-330J1	1	342103304R1
PCB1	C5591	C-CERA C	CC725CH1H-330J1	1	342103304R1
PCB1	C5600	VX C	CE04W25V-100M(VX)	1	393351017
PCB1	C5601	VX C	CE04W50V-47M(VX)	1	393384707
PCB1	C5602	VX C	CE04W50V-47M(VX)	1	393384707
PCB1	C5603	VX C	CE04W50V-47M(VX)	1	393384707
PCB1	C5604	VX C	CE04W50V-47M(VX)	1	393384707
PCB1	C5605	VX C	CE04W50V-47M(VX)	1	393384707
PCB1	C5606	VX C	CE04W50V-47M(VX)	1	393384707
PCB1	C5607	VX C	CE04W50V-47M(VX)	1	393384707
PCB1	C5630	VX C	CE04W50V-47M(VX)	1	393384707
PCB1	C5631	C-CERA C	CC725CH1H-221J1	1	342102214R1
PCB1	C5632	TF C	ECQ-B50V-103J	1	374721034
PCB1	C5666	VX C	CE04W25V-220M(VX)	1	393352217
PCB1	C5667	VX C	CE04W25V-220M(VX)	1	393352217
PCB1	C5670	VX C	CE04W50V-10M(VX)	1	393381007
PCB1	C5671	VX C	CE04W50V-10M(VX)	1	393381007
PCB1	C5672	VX C	CE04W25V-220M(VX)	1	393352217
PCB1	C5673	VX C	CE04W25V-220M(VX)	1	393352217
PCB1	C5674	VX C	CE04W16V-470M(VX)	1	393344717
PCB1	C5675	VX C	CE04W16V-470M(VX)	1	393344717
PCB1	C5708	C-CERA C	CK725B1H-222K1	1	332102225R1
PCB1	C6030	TF C	ECQ-V50V-473J	1	374724734
PCB1	C6031	TF C	ECQ-V50V-473J	1	374724734
PCB1	C6032	TF C	ECQ-V50V-473J	1	374724734
PCB1	C6033	TF C	ECQ-V50V-473J	1	374724734
PCB1	C6034	TF C	ECQ-V50V-473J	1	374724734
PCB1	C6035	TF C	ECQ-V50V-473J	1	374724734
PCB1	C6036	TF C	ECQ-V50V-473J	1	374724734
PCB1	C6040	VX C	CE04W50V-47M(VX)	1	393384707
PCB1	C6041	VX C	CE04W50V-47M(VX)	1	393384707
PCB1	C6042	VX C	CE04W50V-47M(VX)	1	393384707
PCB1	C6043	VX C	CE04W50V-47M(VX)	1	393384707
PCB1	C6044	VX C	CE04W50V-47M(VX)	1	393384707
PCB1	C6045	VX C	CE04W50V-47M(VX)	1	393384707
PCB1	C6046	VX C	CE04W50V-47M(VX)	1	393384707
PCB1	C6050	TF C	ECQ-B50V-103J	1	374721034
PCB1	C6051	TF C	ECQ-B50V-103J	1	374721034
PCB1	C6052	TF C	ECQ-B50V-103J	1	374721034
PCB1	C6053	TF C	ECQ-B50V-103J	1	374721034
PCB1	C6054	TF C	ECQ-B50V-103J	1	374721034
PCB1	C6055	TF C	ECQ-B50V-103J	1	374721034
PCB1	C6056	TF C	ECQ-B50V-103J	1	374721034
PCB1	C6076	TF C	ECQ-B50V-102J	1	374721024
PCB1	C6077	TF C	ECQ-B50V-102J	1	374721024
PCB1	C6086	TF C	ECQ-B50V-103J	1	374721034
PCB1	C6087	TF C	ECQ-B50V-103J	1	374721034

PCB1	C6701	VX C	CE04W25V-100M(VX)	1	393351017
PCB1	C6703	C-CERA C	CK725F1H-104Z1	1	332151040R1
PCB1	C6704	VX C	CE04W50V-1M(VX)	1	393380107
PCB1	C6706	VX C	CE04W50V-10M(VX)	1	393381007
PCB1	C6901	ELECT C	CE69W69V-10000MA	1	3504425
PCB1	C6901A	IB CUSHION	W15 x 3t TAPE	1	28141585
PCB1	C6902	ELECT C	CE69W69V-10000MA	1	3504425
PCB1	C6902A	IB CUSHION	W15 x 3t TAPE	1	28141585
PCB1	C6911	C-CERA C	CC725CH1H-102J1	1	342101024R1
PCB1	C6912	TF C	ECQ-V50V-334J	1	374723344
PCB1	C6913	TF C	ECQ-V50V-334J	1	374723344
PCB1	C6915	TF C	ECQ-V50V-104J	1	374721044
PCB1	C6916	TF C	ECQ-V50V-104J	1	374721044
PCB1	C9001	MMT C	MMT50V-334J	1	375523344
PCB1	C9003	VR C	CE04W35V-1000M(VR)	1	394661027S
PCB1	C9004	VR C	CE04W35V-1000M(VR)	1	394661027S
PCB1	R5000	CARBON R	R16J-1K	1	417341024
PCB1	R5001	CARBON R	R16J-1K	1	417341024
PCB1	R5002	CARBON R	R16J-1K	1	417341024
PCB1	R5003	CARBON R	R16J-1K	1	417341024
PCB1	R5004	CARBON R	R16J-1K	1	417341024
PCB1	R5005	CARBON R	R16J-1K	1	417341024
PCB1	R5006	CARBON R	R16J-1K	1	417341024
PCB1	R5010	CARBON R	R16J-56K	1	417345634
PCB1	R5011	CARBON R	R16J-56K	1	417345634
PCB1	R5012	CARBON R	R16J-56K	1	417345634
PCB1	R5013	CARBON R	R16J-56K	1	417345634
PCB1	R5014	CARBON R	R16J-56K	1	417345634
PCB1	R5015	CARBON R	R16J-56K	1	417345634
PCB1	R5016	CARBON R	R16J-56K	1	417345634
PCB1	R5020	CARBON R	R16J-330	1	417343314
PCB1	R5021	CARBON R	R16J-330	1	417343314
PCB1	R5022	CARBON R	R16J-330	1	417343314
PCB1	R5023	CARBON R	R16J-330	1	417343314
PCB1	R5024	CARBON R	R16J-330	1	417343314
PCB1	R5025	CARBON R	R16J-330	1	417343314
PCB1	R5026	CARBON R	R16J-330	1	417343314
PCB1	R5030	CARBON R	R16J-120K	1	417341244
PCB1	R5031	CARBON R	R16J-120K	1	417341244
PCB1	R5032	CARBON R	R16J-120K	1	417341244
PCB1	R5033	CARBON R	R16J-120K	1	417341244
PCB1	R5034	CARBON R	R16J-120K	1	417341244
PCB1	R5035	CARBON R	R16J-120K	1	417341244
PCB1	R5036	CARBON R	R16J-120K	1	417341244
PCB1	R5040	CARBON R	R16J-2.2K	1	417342224
PCB1	R5041	CARBON R	R16J-2.2K	1	417342224
PCB1	R5042	CARBON R	R16J-2.2K	1	417342224
PCB1	R5043	CARBON R	R16J-2.2K	1	417342224
PCB1	R5044	CARBON R	R16J-2.2K	1	417342224
PCB1	R5045	CARBON R	R16J-2.2K	1	417342224
PCB1	R5046	CARBON R	R16J-2.2K	1	417342224
PCB1	R5050	CARBON R	R16J-4.7K	1	417344724
PCB1	R5051	CARBON R	R16J-4.7K	1	417344724
PCB1	R5052	CARBON R	R16J-4.7K	1	417344724
PCB1	R5053	CARBON R	R16J-4.7K	1	417344724

PCB1	R5054	CARBON R	R16J-4.7K	1	417344724	
PCB1	R5055	CARBON R	R16J-4.7K	1	417344724	
PCB1	R5056	CARBON R	R16J-4.7K	1	417344724	
PCB1	R5060	CARBON R	R16J-1.2K	1	417341224	
PCB1	R5061	CARBON R	R16J-1.2K	1	417341224	
PCB1	R5062	CARBON R	R16J-1.2K	1	417341224	
PCB1	R5063	CARBON R	R16J-1.2K	1	417341224	
PCB1	R5064	CARBON R	R16J-1.2K	1	417341224	
PCB1	R5065	CARBON R	R16J-1.2K	1	417341224	
PCB1	R5066	CARBON R	R16J-1.2K	1	417341224	
PCB1	R5080	CARBON R	R16J-470	1	417344714	
PCB1	R5081	CARBON R	R16J-470	1	417344714	
PCB1	R5082	CARBON R	R16J-470	1	417344714	
PCB1	R5083	CARBON R	R16J-470	1	417344714	
PCB1	R5084	CARBON R	R16J-470	1	417344714	
PCB1	R5085	CARBON R	R16J-470	1	417344714	
PCB1	R5086	CARBON R	R16J-470	1	417344714	
PCB1	R5090	CARBON R	R16J-100K	1	417341044	
PCB1	R5091	CARBON R	R16J-100K	1	417341044	
PCB1	R5092	CARBON R	R16J-100K	1	417341044	
PCB1	R5093	CARBON R	R16J-100K	1	417341044	
PCB1	R5094	CARBON R	R16J-100K	1	417341044	
PCB1	R5095	CARBON R	R16J-100K	1	417341044	
PCB1	R5096	CARBON R	R16J-100K	1	417341044	
PCB1	R5100	CARBON R	R16J-100K	1	417341044	
PCB1	R5101	CARBON R	R16J-100K	1	417341044	
PCB1	R5102	CARBON R	R16J-100K	1	417341044	
PCB1	R5103	CARBON R	R16J-100K	1	417341044	
PCB1	R5104	CARBON R	R16J-100K	1	417341044	
PCB1	R5105	CARBON R	R16J-100K	1	417341044	
PCB1	R5106	CARBON R	R16J-100K	1	417341044	
PCB1	R5110	CARBON R	R16J-1K	1	417341024	
PCB1	R5111	CARBON R	R16J-1K	1	417341024	
PCB1	R5112	CARBON R	R16J-1K	1	417341024	
PCB1	R5113	CARBON R	R16J-1K	1	417341024	
PCB1	R5114	CARBON R	R16J-1K	1	417341024	
PCB1	R5115	CARBON R	R16J-1K	1	417341024	
PCB1	R5116	CARBON R	R16J-1K	1	417341024	
PCB1	R5130	CARBON R	R16J-22K	1	417342234	
PCB1	R5131	CARBON R	R16J-22K	1	417342234	
PCB1	R5132	CARBON R	R16J-22K	1	417342234	
PCB1	R5133	CARBON R	R16J-22K	1	417342234	
PCB1	R5134	CARBON R	R16J-22K	1	417342234	
PCB1	R5135	CARBON R	R16J-22K	1	417342234	
PCB1	R5136	CARBON R	R16J-22K	1	417342234	
PCB1	R5160	NF CARBON R	R25J-150	1	415471514	
PCB1	R5161	NF CARBON R	R25J-150	1	415471514	
PCB1	R5162	NF CARBON R	R25J-150	1	415471514	
PCB1	R5163	NF CARBON R	R25J-150	1	415471514	
PCB1	R5164	NF CARBON R	R25J-150	1	415471514	
PCB1	R5165	NF CARBON R	R25J-150	1	415471514	
PCB1	R5166	NF CARBON R	R25J-150	1	415471514	
PCB1	R5170	NF CARBON R	R25J-150	1	415471514	
PCB1	R5171	NF CARBON R	R25J-150	1	415471514	
PCB1	R5172	NF CARBON R	R25J-150	1	415471514	

PCB1	R5173	NF CARBON R	R25J-150	1	415471514	
PCB1	R5174	NF CARBON R	R25J-150	1	415471514	
PCB1	R5175	NF CARBON R	R25J-150	1	415471514	
PCB1	R5176	NF CARBON R	R25J-150	1	415471514	
PCB1	R5180	NF CARBON R	R25J-10	1	415471004	
PCB1	R5181	NF CARBON R	R25J-10	1	415471004	
PCB1	R5182	NF CARBON R	R25J-10	1	415471004	
PCB1	R5183	NF CARBON R	R25J-10	1	415471004	
PCB1	R5184	NF CARBON R	R25J-10	1	415471004	
PCB1	R5185	NF CARBON R	R25J-10	1	415471004	
PCB1	R5186	NF CARBON R	R25J-10	1	415471004	
PCB1	R5190	NF CARBON R	R25J-10	1	415471004	
PCB1	R5191	NF CARBON R	R25J-10	1	415471004	
PCB1	R5192	NF CARBON R	R25J-10	1	415471004	
PCB1	R5193	NF CARBON R	R25J-10	1	415471004	
PCB1	R5194	NF CARBON R	R25J-10	1	415471004	
PCB1	R5195	NF CARBON R	R25J-10	1	415471004	
PCB1	R5196	NF CARBON R	R25J-10	1	415471004	
PCB1	R5200	CARBON R	R16J-22K	1	417342234	
PCB1	R5201	CARBON R	R16J-22K	1	417342234	
PCB1	R5202	CARBON R	R16J-22K	1	417342234	
PCB1	R5203	CARBON R	R16J-22K	1	417342234	
PCB1	R5204	CARBON R	R16J-22K	1	417342234	
PCB1	R5205	CARBON R	R16J-22K	1	417342234	
PCB1	R5206	CARBON R	R16J-22K	1	417342234	
PCB1	R5230	CARBON R	R16J-120K	1	417341244	
PCB1	R5231	CARBON R	R16J-120K	1	417341244	
PCB1	R5232	CARBON R	R16J-120K	1	417341244	
PCB1	R5233	CARBON R	R16J-120K	1	417341244	
PCB1	R5234	CARBON R	R16J-120K	1	417341244	
PCB1	R5235	CARBON R	R16J-120K	1	417341244	
PCB1	R5236	CARBON R	R16J-120K	1	417341244	
PCB1	R5500	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB1	R5503	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB1	R5504	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB1	R5505	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB1	R5506	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB1	R5507	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB1	R5508	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB1	R5513	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB1	R5514	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB1	R5515	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB1	R5516	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB1	R5517	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB1	R5518	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB1	R5519	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB1	R5520	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB1	R5521	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB1	R5522	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB1	R5523	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB1	R5524	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB1	R5525	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB1	R5526	C-CARBON R	RN72K1J-331JE	1	435033314R1	
PCB1	R5531	C-CARBON R	RN72K1J-101JE	1	435031014R1	
PCB1	R5541	C-CARBON R	RN72K1J-224JE	1	435032244R1	

PCB1	R5542	C-CARBON R	RN72K1J-224JE	1	435032244R1	
PCB1	R5543	C-CARBON R	RN72K1J-224JE	1	435032244R1	
PCB1	R5544	C-CARBON R	RN72K1J-224JE	1	435032244R1	
PCB1	R5545	C-CARBON R	RN72K1J-224JE	1	435032244R1	
PCB1	R5546	C-CARBON R	RN72K1J-224JE	1	435032244R1	
PCB1	R5547	C-CARBON R	RN72K1J-224JE	1	435032244R1	
PCB1	R5548	C-CARBON R	RN72K1J-224JE	1	435032244R1	
PCB1	R5553	C-CARBON R	RN72K1J-224JE	1	435032244R1	
PCB1	R5554	C-CARBON R	RN72K1J-224JE	1	435032244R1	
PCB1	R5555	C-CARBON R	RN72K1J-224JE	1	435032244R1	
PCB1	R5556	C-CARBON R	RN72K1J-224JE	1	435032244R1	
PCB1	R5557	C-CARBON R	RN72K1J-224JE	1	435032244R1	
PCB1	R5558	C-CARBON R	RN72K1J-224JE	1	435032244R1	
PCB1	R5559	C-CARBON R	RN72K1J-224JE	1	435032244R1	
PCB1	R5560	C-CARBON R	RN72K1J-224JE	1	435032244R1	
PCB1	R5561	C-CARBON R	RN72K1J-224JE	1	435032244R1	
PCB1	R5562	C-CARBON R	RN72K1J-224JE	1	435032244R1	
PCB1	R5563	C-CARBON R	RN72K1J-224JE	1	435032244R1	
PCB1	R5564	C-CARBON R	RN72K1J-224JE	1	435032244R1	
PCB1	R5565	C-CARBON R	RN72K1J-224JE	1	435032244R1	
PCB1	R5566	C-CARBON R	RN72K1J-224JE	1	435032244R1	
PCB1	R5575	C-CARBON R	RN72K1J-224JE	1	435032244R1	
PCB1	R5576	C-CARBON R	RN72K1J-224JE	1	435032244R1	
PCB1	R5577	C-CARBON R	RN72K1J-473JE	1	435034734R1	
PCB1	R5578	C-CARBON R	RN72K1J-473JE	1	435034734R1	
PCB1	R5580	C-CARBON R	RN72K1J-224JE	1	435032244R1	<DD, DC>
PCB1	R5581	C-CARBON R	RN72K1J-224JE	1	435032244R1	<DD, DC>
PCB1	R5585	C-CARBON R	RN72K1J-182JE	1	435031824R1	
PCB1	R5586	C-CARBON R	RN72K1J-182JE	1	435031824R1	
PCB1	R5587	C-CARBON R	RN72K1J-103JE	1	435031034R1	
PCB1	R5588	C-CARBON R	RN72K1J-103JE	1	435031034R1	
PCB1	R5589	CARBON R	R16J-1K	1	417341024	
PCB1	R5590	C-CARBON R	RN72K1J-103JE	1	435031034R1	
PCB1	R5591	C-CARBON R	RN72K1J-103JE	1	435031034R1	
PCB1	R5592	C-CARBON R	RN72K1J-471JE	1	435034714R1	
PCB1	R5593	C-CARBON R	RN72K1J-122JE	1	435031224R1	
PCB1	R5594	C-CARBON R	RN72K1J-103JE	1	435031034R1	
PCB1	R5595	C-CARBON R	RN72K1J-103JE	1	435031034R1	
PCB1	R5596	C-CARBON R	RN72K1J-471JE	1	435034714R1	
PCB1	R5597	C-CARBON R	RN72K1J-122JE	1	435031224R1	
PCB1	R5598	C-CARBON R	RN72K1J-103JE	1	435031034R1	
PCB1	R5599	C-CARBON R	RN72K1J-103JE	1	435031034R1	
PCB1	R5600	C-CARBON R	RN72K1J-224JE	1	435032244R1	
PCB1	R5601	C-CARBON R	RN72K1J-224JE	1	435032244R1	
PCB1	R5602	C-CARBON R	RN72K1J-224JE	1	435032244R1	
PCB1	R5603	C-CARBON R	RN72K1J-224JE	1	435032244R1	
PCB1	R5604	C-CARBON R	RN72K1J-224JE	1	435032244R1	
PCB1	R5605	C-CARBON R	RN72K1J-224JE	1	435032244R1	
PCB1	R5606	C-CARBON R	RN72K1J-224JE	1	435032244R1	
PCB1	R5607	C-CARBON R	RN72K1J-224JE	1	435032244R1	
PCB1	R5610	C-CARBON R	RN72K1J-271JE	1	435032714R1	
PCB1	R5611	C-CARBON R	RN72K1J-222JE	1	435032224R1	
PCB1	R5612	C-CARBON R	RN72K1J-222JE	1	435032224R1	
PCB1	R5613	C-CARBON R	RN72K1J-222JE	1	435032224R1	
PCB1	R5614	C-CARBON R	RN72K1J-222JE	1	435032224R1	

PCB1	R5615	C-CARBON R	RN72K1J-222JE	1	435032224R1	
PCB1	R5616	C-CARBON R	RN72K1J-222JE	1	435032224R1	
PCB1	R5617	C-CARBON R	RN72K1J-222JE	1	435032224R1	
PCB1	R5620	C-CARBON R	RN72K1J-101JE	1	435031014R1	
PCB1	R5621	C-CARBON R	RN72K1J-000JE	1	435030004R1	
PCB1	R5622	C-CARBON R	RN72K1J-000JE	1	435030004R1	
PCB1	R5623	C-CARBON R	RN72K1J-000JE	1	435030004R1	
PCB1	R5624	C-CARBON R	RN72K1J-000JE	1	435030004R1	
PCB1	R5625	C-CARBON R	RN72K1J-000JE	1	435030004R1	
PCB1	R5626	C-CARBON R	RN72K1J-000JE	1	435030004R1	
PCB1	R5627	C-CARBON R	RN72K1J-000JE	1	435030004R1	
PCB1	R5630	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB1	R5631	C-CARBON R	RN72K1J-473JE	1	435034734R1	
PCB1	R5632	C-CARBON R	RN72K1J-153JE	1	435031534R1	
PCB1	R5633	C-CARBON R	RN72K1J-122JE	1	435031224R1	
PCB1	R5634	C-CARBON R	RN72K1J-103JE	1	435031034R1	
PCB1	R5660	METAL R	RNU1WCJ-2.2	1	453630224	
PCB1	R5661	METAL R	RNU1WCJ-2.2	1	453630224	
PCB1	R5666	CARBON R	R16J-22	1	417342204	
PCB1	R5667	CARBON R	R16J-22	1	417342204	
PCB1	R5670	METAL O R	RS2WBJ-47	1	441724704F	
PCB1	R5671	METAL O R	RS2WBJ-68	1	441726804F	
PCB1	R5672	METAL O R	RS2WBJ-47	1	441724704F	
PCB1	R5673	METAL O R	RS2WBJ-68	1	441726804F	
PCB1	R5674	METAL O R	RS1WBJ-82	1	443628204	
PCB1	R5675	METAL O R	RS1WBJ-82	1	443628204	
PCB1	R5677	METAL O R	RS2WBJ-15	1	441721504F	
PCB1	R5678	METAL O R	RS2WBJ-15	1	441721504F	
PCB1	R5681	C-CARBON R	RN72K1J-224JE	1	435032244R1	
PCB1	R5814	C-CARBON R	RN72K1J-000JE	1	435030004R1	
PCB1	R5820	C-CARBON R	RN72K1J-000JE	1	435030004R1	
PCB1	R5822	C-CARBON R	RN72K1J-000JE	1	435030004R1	
PCB1	R5823	C-CARBON R	RN72K1J-000JE	1	435030004R1	
PCB1	R6000	CARBON R	R16J-5.6K	1	417345624	
PCB1	R6001	CARBON R	R16J-5.6K	1	417345624	
PCB1	R6002	CARBON R	R16J-5.6K	1	417345624	
PCB1	R6003	CARBON R	R16J-5.6K	1	417345624	
PCB1	R6004	CARBON R	R16J-5.6K	1	417345624	
PCB1	R6005	CARBON R	R16J-5.6K	1	417345624	
PCB1	R6006	CARBON R	R16J-5.6K	1	417345624	
PCB1	R6010	CARBON R	R16J-3.9K	1	417343924	
PCB1	R6011	CARBON R	R16J-3.9K	1	417343924	
PCB1	R6012	CARBON R	R16J-3.9K	1	417343924	
PCB1	R6013	CARBON R	R16J-3.9K	1	417343924	
PCB1	R6014	CARBON R	R16J-3.9K	1	417343924	
PCB1	R6015	CARBON R	R16J-3.9K	1	417343924	
PCB1	R6016	CARBON R	R16J-3.9K	1	417343924	
PCB1	R6020	NF CARBON R	R25J-2.2	1	415470224	
PCB1	R6021	NF CARBON R	R25J-2.2	1	415470224	
PCB1	R6022	NF CARBON R	R25J-2.2	1	415470224	
PCB1	R6023	NF CARBON R	R25J-2.2	1	415470224	
PCB1	R6024	NF CARBON R	R25J-2.2	1	415470224	
PCB1	R6025	NF CARBON R	R25J-2.2	1	415470224	
PCB1	R6026	NF CARBON R	R25J-2.2	1	415470224	
PCB1	R6030	CARBON R	R16J-470	1	417344714	

PCB1	R6031	CARBON R	R16J-470	1	417344714	
PCB1	R6032	CARBON R	R16J-470	1	417344714	
PCB1	R6033	CARBON R	R16J-470	1	417344714	
PCB1	R6034	CARBON R	R16J-470	1	417344714	
PCB1	R6035	CARBON R	R16J-470	1	417344714	
PCB1	R6036	CARBON R	R16J-470	1	417344714	
PCB1	R6040	TRIM R	N06HR2KBC	1	5210390	
PCB1	R6041	TRIM R	N06HR2KBC	1	5210390	
PCB1	R6042	TRIM R	N06HR2KBC	1	5210390	
PCB1	R6043	TRIM R	N06HR2KBC	1	5210390	
PCB1	R6044	TRIM R	N06HR2KBC	1	5210390	
PCB1	R6045	TRIM R	N06HR2KBC	1	5210390	
PCB1	R6046	TRIM R	N06HR2KBC	1	5210390	
PCB1	R6050	CARBON R	R16J-3.3K	1	417343324	
PCB1	R6051	CARBON R	R16J-3.3K	1	417343324	
PCB1	R6052	CARBON R	R16J-3.3K	1	417343324	
PCB1	R6053	CARBON R	R16J-3.3K	1	417343324	
PCB1	R6054	CARBON R	R16J-3.3K	1	417343324	
PCB1	R6055	CARBON R	R16J-3.3K	1	417343324	
PCB1	R6056	CARBON R	R16J-3.3K	1	417343324	
PCB1	R6070	NF CARBON R	R25J-120	1	415471214	
PCB1	R6071	NF CARBON R	R25J-120	1	415471214	
PCB1	R6072	NF CARBON R	R25J-120	1	415471214	
PCB1	R6073	NF CARBON R	R25J-120	1	415471214	
PCB1	R6074	NF CARBON R	R25J-120	1	415471214	
PCB1	R6075	NF CARBON R	R25J-120	1	415471214	
PCB1	R6076	NF CARBON R	R25J-120	1	415471214	
PCB1	R6080	NF CARBON R	R25J-0.22	1	415472294	
PCB1	R6081	NF CARBON R	R25J-0.22	1	415472294	
PCB1	R6082	NF CARBON R	R25J-0.22	1	415472294	
PCB1	R6083	NF CARBON R	R25J-0.22	1	415472294	
PCB1	R6084	NF CARBON R	R25J-0.22	1	415472294	
PCB1	R6085	NF CARBON R	R25J-0.22	1	415472294	
PCB1	R6086	NF CARBON R	R25J-0.22	1	415472294	
PCB1	R6090	NF CARBON R	R25J-0.22	1	415472294	
PCB1	R6091	NF CARBON R	R25J-0.22	1	415472294	
PCB1	R6092	NF CARBON R	R25J-0.22	1	415472294	
PCB1	R6093	NF CARBON R	R25J-0.22	1	415472294	
PCB1	R6094	NF CARBON R	R25J-0.22	1	415472294	
PCB1	R6095	NF CARBON R	R25J-0.22	1	415472294	
PCB1	R6096	NF CARBON R	R25J-0.22	1	415472294	
PCB1	R6100	METAL PR	MPR2W+2W 0R22	1	4000234	
PCB1	R6100 or	OTHER R	RGC22-0.22 OHMK	(1)	4000131	
PCB1	R6100 or	METAL PR	MPC708-2WK-0.22	(1)	4500027	
PCB1	R6101	METAL PR	MPR2W+2W 0R22	1	4000234	
PCB1	R6101 or	OTHER R	RGC22-0.22 OHMK	(1)	4000131	
PCB1	R6101 or	METAL PR	MPC708-2WK-0.22	(1)	4500027	
PCB1	R6102	METAL PR	MPR2W+2W 0R22	1	4000234	
PCB1	R6102 or	OTHER R	RGC22-0.22 OHMK	(1)	4000131	
PCB1	R6102 or	METAL PR	MPC708-2WK-0.22	(1)	4500027	
PCB1	R6103	METAL PR	MPR2W+2W 0R22	1	4000234	
PCB1	R6103 or	OTHER R	RGC22-0.22 OHMK	(1)	4000131	
PCB1	R6103 or	METAL PR	MPC708-2WK-0.22	(1)	4500027	
PCB1	R6104	METAL PR	MPR2W+2W 0R22	1	4000234	
PCB1	R6104 or	OTHER R	RGC22-0.22 OHMK	(1)	4000131	

PCB1	R6104 or	METAL PR	MPC708-2WK-0.22	(1)	4500027
PCB1	R6105	METAL PR	MPR2W+2W 0R22	1	4000234
PCB1	R6105 or	OTHER R	RGC22-0.22 OHMK	(1)	4000131
PCB1	R6105 or	METAL PR	MPC708-2WK-0.22	(1)	4500027
PCB1	R6106	METAL PR	MPR2W+2W 0R22	1	4000234
PCB1	R6106 or	OTHER R	RGC22-0.22 OHMK	(1)	4000131
PCB1	R6106 or	METAL PR	MPC708-2WK-0.22	(1)	4500027
PCB1	R6130	METAL R	RNU1WCJ-8.2	1	453630824
PCB1	R6131	METAL R	RNU1WCJ-8.2	1	453630824
PCB1	R6132	METAL R	RNU1WCJ-8.2	1	453630824
PCB1	R6133	METAL R	RNU1WCJ-8.2	1	453630824
PCB1	R6134	METAL R	RNU1WCJ-8.2	1	453630824
PCB1	R6135	METAL R	RNU1WCJ-8.2	1	453630824
PCB1	R6136	METAL R	RNU1WCJ-8.2	1	453630824
PCB1	R6140	C-CARBON R	RN72K1J-223JE	1	435032234R1
PCB1	R6141	C-CARBON R	RN72K1J-223JE	1	435032234R1
PCB1	R6142	C-CARBON R	RN72K1J-223JE	1	435032234R1
PCB1	R6143	C-CARBON R	RN72K1J-223JE	1	435032234R1
PCB1	R6144	C-CARBON R	RN72K1J-223JE	1	435032234R1
PCB1	R6145	C-CARBON R	RN72K1J-223JE	1	435032234R1
PCB1	R6146	C-CARBON R	RN72K1J-223JE	1	435032234R1
PCB1	R6150	C-CARBON R	RN72K1J-123JE	1	435031234R1
PCB1	R6151	C-CARBON R	RN72K1J-123JE	1	435031234R1
PCB1	R6152	C-CARBON R	RN72K1J-123JE	1	435031234R1
PCB1	R6153	C-CARBON R	RN72K1J-123JE	1	435031234R1
PCB1	R6154	C-CARBON R	RN72K1J-123JE	1	435031234R1
PCB1	R6155	C-CARBON R	RN72K1J-123JE	1	435031234R1
PCB1	R6156	C-CARBON R	RN72K1J-123JE	1	435031234R1
PCB1	R6160	CARBON R	R16J-33K	1	417343334
PCB1	R6161	CARBON R	R16J-33K	1	417343334
PCB1	R6162	CARBON R	R16J-33K	1	417343334
PCB1	R6163	CARBON R	R16J-33K	1	417343334
PCB1	R6164	CARBON R	R16J-33K	1	417343334
PCB1	R6165	CARBON R	R16J-33K	1	417343334
PCB1	R6166	CARBON R	R16J-33K	1	417343334
PCB1	R6170	CARBON R	R16J-47K	1	417344734
PCB1	R6171	CARBON R	R16J-47K	1	417344734
PCB1	R6172	CARBON R	R16J-47K	1	417344734
PCB1	R6173	CARBON R	R16J-47K	1	417344734
PCB1	R6174	CARBON R	R16J-47K	1	417344734
PCB1	R6175	CARBON R	R16J-47K	1	417344734
PCB1	R6176	CARBON R	R16J-47K	1	417344734
PCB1	R6180	CARBON R	R16J-47K	1	417344734
PCB1	R6181	CARBON R	R16J-47K	1	417344734
PCB1	R6182	CARBON R	R16J-47K	1	417344734
PCB1	R6183	CARBON R	R16J-47K	1	417344734
PCB1	R6184	CARBON R	R16J-47K	1	417344734
PCB1	R6185	CARBON R	R16J-47K	1	417344734
PCB1	R6186	CARBON R	R16J-47K	1	417344734
PCB1	R6190	C-CARBON R	RN72K1J-224JE	1	435032244R1
PCB1	R6191	C-CARBON R	RN72K1J-224JE	1	435032244R1
PCB1	R6192	C-CARBON R	RN72K1J-224JE	1	435032244R1
PCB1	R6193	C-CARBON R	RN72K1J-224JE	1	435032244R1
PCB1	R6194	C-CARBON R	RN72K1J-224JE	1	435032244R1
PCB1	R6195	C-CARBON R	RN72K1J-224JE	1	435032244R1

PCB1	R6196	C-CARBON R	RN72K1J-224JE	1	435032244R1	
PCB1	R6197	METAL O R	RS1WBJ-100	1	443621014	
PCB1	R6701	C-CARBON R	RN72K1J-223JE	1	435032234R1	
PCB1	R6702	C-CARBON R	RN72K1J-103JE	1	435031034R1	
PCB1	R6704	C-CARBON R	RN72K1J-473JE	1	435034734R1	
PCB1	R6706	C-CARBON R	RN72K1J-224JE	1	435032244R1	
PCB1	R6708	C-CARBON R	RN72K1J-333JE	1	435033334R1	
PCB1	R6709	C-CARBON R	RN72K1J-562JE	1	435035624R1	
PCB1	R6710	C-CARBON R	RN72K1J-123JE	1	435031234R1	
PCB1	R6902	C-CARBON R	RN72K1J-102JE	1	435031024R1	
PCB1	R6903	C-CARBON R	RN72K1J-473JE	1	435034734R1	
PCB1	RL6901	RELAY	NRL-1P10A-DC12-140	1	25065584	!
PCB1	RL6901 or	RELAY	NRL-1P10A-DC12-143	(1)	25065588	!
PCB1	RL6902	RELAY	NRL-1P10A-DC12-140	1	25065584	!
PCB1	RL6902 or	RELAY	NRL-1P10A-DC12-143	(1)	25065588	!
PCB1	P302	PLUG	NPLG-14P0969	1	25056019	
PCB1	P303	PLUG	NPLG-14P0969	1	25056019	
PCB1	P304	PLUG	NPLG-3P0958	1	25056008	
PCB1	P5505	TRM(SCREW)	NEGITANSI M3	1	25065425	
PCB1	P6002	TRM	NTM-4PDML365	1	25060436	
PCB1	P6080	PLUG	NPLG-2P29	1	25055038	
PCB1	P6081	PLUG	NPLG-2P29	1	25055038	
PCB1	P6082	PLUG	NPLG-2P29	1	25055038	
PCB1	P6083	PLUG	NPLG-2P29	1	25055038	
PCB1	P6084	PLUG	NPLG-2P29	1	25055038	
PCB1	P6085	PLUG	NPLG-2P29	1	25055038	
PCB1	P6086	PLUG	NPLG-2P29	1	25055038	
PCB1	P6900	CRIMP AS	CRIMP AS	1	20799162UL	
PCB1	P6901	CRIMP AS	CRIMP AS	1	2069925226UL	
PCB1	P6902	CRIMP AS	CRIMP AS	1	2069925189UL	
PCB1	P6903	CRIMP AS	CRIMP AS	1	20799163UL	
PCB1	P6904	CRIMP AS	CRIMP AS	1	20799164UL	
PCB1	P6911	RETAINER	(BUS)	1	27142022	
PCB1	P7900	ST JACK	LGY2502-0200FC	1	25045696	
PCB1	P7902	PIN JACK	NPJ-6PDWWWRRR561	1	25045779	
PCB1	P7902 or	PIN JACK	NPJ-6PDBL159	(1)	25045300	
PCB1	P7904	PIN JACK	NPJ-6PDWWWRRR561	1	25045779	
PCB1	P7904 or	PIN JACK	NPJ-6PDBL159	(1)	25045300	
PCB1	P7905	PIN JACK	NPJ-4PDWLRE642	1	25045866	
PCB1	P7906	PIN JACK	NPJ-4PDGNPT643	1	25045867	
PCB1	P7908	PIN JACK	NPJ-1PDP555	1	25045773	
PCB1	F6901A	FUSE HOL	NSCT-1P2031	1	25052133	!
PCB1	F6901B	FUSE HOL	NSCT-1P2031	1	25052133	!
PCB1	F6902A	FUSE HOL	NSCT-1P2031	1	25052133	!
PCB1	F6902B	FUSE HOL	NSCT-1P2031	1	25052133	!
PCB1	J5500	PVC	1007#24 .2/7HAND B	1	---	NSP
PCB1	J5500 or	PVC	1007#24 .2/7HAND R	(1)	---	NSP
PCB1	JL5502	JUMPER LEAD	JL7 400 B	1	---	NSP
PCB1	JL5502A	WIRE HOL	NSCT-7P878	1	25051091	
PCB1	JL6402	JUMPER LEAD	JL3 300 B	1	---	NSP
PCB1	JL6402A	WIRE HOL	NSCT-3P874	1	25051087	
PCB1	JL6600	JUMPER LEAD	JL7 200 H	1	---	NSP
PCB1	JL6600A	WIRE HOL	NSCT-7P898	1	25051111	
PCB1	JL6603	JUMPER LEAD	JL9 200 H	1	---	NSP
PCB1	JL6603A	WIRE HOL	NSCT-9P900	1	25051113	

PCB1	JL6604	JUMPER LEAD	JL4 200 H	1	---	NSP
PCB1	JL6604A	WIRE HOL	NSCT-4P895	1	25051108	
PCB1	JL6952	JUMPER LEAD	JL4 150 H	1	---	NSP
PCB1	JL6952A	WIRE HOL	NSCT-4P895	1	25051108	
PCB1	JL6952B	WIRE HOL	NSCT-4P895	1	25051108	

PCB2 **U05** DISPLAY PC BOARD (NADIS-8785-1A/ 1B)
PCB2 **U06** SWITCH PC BOARD (NADIS-8786-1A/ 1B)
PCB2 **U07** POWER SUPPLY PC BOARD (NAPS-8787-1A/ 1B)
PCB2 **U08** TRANS SEC. TERMINAL PC BOARD (NAETC-8788-1A/ 1B)
PCB2 **U10** HEADPHONE JACK PC BOARD (NAETC-8790-1A/ 1B)
PCB2

	CIRCUIT NO.	PART NAME	DESCRIPTION	Q'TY	PART NO. (SN)	REMARKS
PCB2	U7041	REMO SENS	NJL34H380A	1	241365	
PCB2	Q7001	FL TUBE	16-BT-128GNYK	1	212258A	
PCB2	Q7001A	HOLDER	(FL)	1	27191222B	
PCB2	Q7003	IC	M66005-0001AHP	1	22242208R3	
PCB2	Q7004	TR	2SC2458-GR	1	2212115	
PCB2	Q7004 or	TR	2SC1740S-R	(1)	2213284	
PCB2	Q7004 or	TR	2SC1740S-S	(1)	2213285	
PCB2	Q7151	TR	KRA102M	1	2215770	<PA>
PCB2	Q7151 or	TR	DTA114ES	(1)	2213510	<PA>
PCB2	T902	P TRANS	NPT-1520JQ	1	2301812	!, <DD, DC>
PCB2	T902	P TRANS	NPT-1519GQ	1	2301811	!, <PA>
PCB2	L7031	CHOKE COIL	NCH-1452 022M	1	233454M022	
PCB2	L7031 or	CHOKE COIL	NCH-1561 022K	(1)	233526K022	
PCB2	L7201	CHOKE COIL	NCH-1452 022M	1	233454M022	
PCB2	L7201 or	CHOKE COIL	NCH-1561 022K	(1)	233526K022	
PCB2	L7202	CHOKE COIL	NCH-1452 022M	1	233454M022	
PCB2	L7202 or	CHOKE COIL	NCH-1561 022K	(1)	233526K022	
PCB2	L7203	CHOKE COIL	NCH-1452 022M	1	233454M022	
PCB2	L7203 or	CHOKE COIL	NCH-1561 022K	(1)	233526K022	
PCB2	D7002	ZENER D	DZ-8.2BSC	1	224850823	
PCB2	D7002 or	ZENER D	MTZJ8.2C	(1)	224470823	
PCB2	D7151	LED	SLI-343URC-TE7	1	225449	
PCB2	D7153	LED	SDPB3DD0C	1	225464	<PA>
PCB2	D911	DIODE	1SS133(DS)	1	223280	
PCB2	D911 or	DIODE	1SS133	(1)	223163	
PCB2	D912	DIODE	1SS133(DS)	1	223280	
PCB2	D912 or	DIODE	1SS133	(1)	223163	
PCB2	D921	DIODE	1SS133(DS)	1	223280	
PCB2	D921 or	DIODE	1SS133	(1)	223163	
PCB2	D922	DIODE	1SS133(DS)	1	223280	
PCB2	D922 or	DIODE	1SS133	(1)	223163	
PCB2	D923	DIODE	1SS133(DS)	1	223280	
PCB2	D923 or	DIODE	1SS133	(1)	223163	
PCB2	D924	DIODE	1SS133(DS)	1	223280	
PCB2	D924 or	DIODE	1SS133	(1)	223163	
PCB2	D925	DIODE	1SS133(DS)	1	223280	
PCB2	D925 or	DIODE	1SS133	(1)	223163	
PCB2	D930	DIODE	1SS133(DS)	1	223280	
PCB2	D930 or	DIODE	1SS133	(1)	223163	
PCB2	D931	DIODE	1SS133(DS)	1	223280	
PCB2	D931 or	DIODE	1SS133	(1)	223163	
PCB2	D933	DIODE	1SS133(DS)	1	223280	

PCB2	D933 or	DIODE	1SS133	(1)	223163	
PCB2	D934	ZENER D	DZ-5.1BSB	1	224850512	
PCB2	D934 or	ZENER D	MTZJ5.1B	(1)	224470512	
PCB2	D935	DIODE	1SS133(DS)	1	223280	
PCB2	D935 or	DIODE	1SS133	(1)	223163	
PCB2	C901	IS C	ECQU2A103MLC	1	3800039S	!
PCB2	C901 or	IS C	RE275V-103M	(1)	3500196S	!
PCB2	C901 or	IS C	LE103-C3.5	(1)	3800042S	!
PCB2	C902	TF C	ECQ-V50V-104J	1	374721044	
PCB2	C911	TF C	ECQ-B50V-102J	1	374721024	
PCB2	C921	CERA C	CK45F50V-223Z	1	335622230	
PCB2	C922	VR C	CE04W25V-2200M(VR)	1	394652227S	<DD, DC>
PCB2	C922	VR C	CE04W16V-2200M(VR)	1	394642227S	<PA>
PCB2	C930	VR C	CE04W35V-100M(VR)	1	394661017	
PCB2	C933	VR C	CE04W50V-4.7M(VR)	1	394680477	
PCB2	C7001	CERA C	CK45F50V-223Z	1	335622230	
PCB2	C7002	MMT C	MMT50V-104J	1	375521044	
PCB2	C7003	CERA C	CC45SL50V-101J	1	345021014	
PCB2	C7004	CERA C	CC45SL50V-101J	1	345021014	
PCB2	C7005	CERA C	CC45SL50V-101J	1	345021014	
PCB2	C7007	CERA C	CC45SL50V-101J	1	345021014	
PCB2	C7008	ELECT C	CE04W6.3V-100M	1	355721019	
PCB2	C7009	MMT C	MMT50V-104J	1	375521044	
PCB2	C7010	CERA C	CK45F50V-223Z	1	335622230	
PCB2	C7011	CERA C	CK45F50V-223Z	1	335622230	
PCB2	C7012	CERA C	CK45F50V-223Z	1	335622230	
PCB2	C7013	ELECT C	CE04W50V-33M	1	355783309	
PCB2	C7014	CERA C	CK45F50V-223Z	1	335622230	
PCB2	C7015	ELECT C	CE04W16V-100M	1	355741019	
PCB2	C7021	CERA C	CK45F50V-103Z	1	335621030	
PCB2	C7022	CERA C	CK45F50V-103Z	1	335621030	
PCB2	C7041	ELECT C	CE04W6.3V-100M(S)	1	353721019	
PCB2	C7043	CERA C	CK45B50V-102K	1	335321025	
PCB2	C7201	TF C	ECQ-B50V-102J	1	374721024	
PCB2	C7202	TF C	ECQ-B50V-102J	1	374721024	
PCB2	C7203	TF C	ECQ-B50V-102J	1	374721024	
PCB2	C7204	TF C	ECQ-B50V-102J	1	374721024	
PCB2	C7301	TF C	ECQ-B50V-471J	1	374724714	
PCB2	C7302	TF C	ECQ-B50V-471J	1	374724714	
PCB2	C7303	MMT C	MMT50V-104J	1	375521044	
PCB2	C7304	MMT C	MMT50V-104J	1	375521044	
PCB2	C7305	MMT C	MMT50V-104J	1	375521044	
PCB2	R921	METAL O R	RS1/2WBJ-56	1	443525604	
PCB2	R934	CARBON R	R16J-100K	1	417341044	
PCB2	R7001	CARBON R	R16J-100K	1	417341044	
PCB2	R7002	CARBON R	R16J-3.3K	1	417343324	
PCB2	R7003	CARBON R	R16J-3.3K	1	417343324	
PCB2	R7004	CARBON R	R16J-220	1	417342214	
PCB2	R7005	CARBON R	R16J-220	1	417342214	
PCB2	R7006	CARBON R	R16J-27K	1	417342734	
PCB2	R7007	CARBON R	R16J-220	1	417342214	
PCB2	R7008	CARBON R	R16J-220	1	417342214	
PCB2	R7021	CARBON R	R16J-10K	1	417341034	
PCB2	R7022	CARBON R	R16J-10K	1	417341034	
PCB2	R7023	CARBON R	R16J-10K	1	417341034	

PCB2	R7024	CARBON R	R16J-10K	1	417341034	
PCB2	R7041	CARBON R	R16J-100	1	417341014	
PCB2	R7042	CARBON R	R16J-1K	1	417341024	
PCB2	R7101	CARBON R	R16J-330	1	417343314	
PCB2	R7102	CARBON R	R16J-470	1	417344714	
PCB2	R7103	CARBON R	R16J-560	1	417345614	
PCB2	R7104	CARBON R	R16J-820	1	417348214	
PCB2	R7105	CARBON R	R16J-1.2K	1	417341224	
PCB2	R7106	CARBON R	R16J-2.2K	1	417342224	
PCB2	R7107	CARBON R	R16J-330	1	417343314	
PCB2	R7108	CARBON R	R16J-470	1	417344714	
PCB2	R7109	CARBON R	R16J-560	1	417345614	
PCB2	R7110	CARBON R	R16J-820	1	417348214	
PCB2	R7111	CARBON R	R16J-1.2K	1	417341224	
PCB2	R7112	CARBON R	R16J-2.2K	1	417342224	
PCB2	R7113	CARBON R	R16J-3.9K	1	417343924	
PCB2	R7115	CARBON R	R16J-330	1	417343314	
PCB2	R7116	CARBON R	R16J-470	1	417344714	
PCB2	R7117	CARBON R	R16J-560	1	417345614	
PCB2	R7118	CARBON R	R16J-820	1	417348214	
PCB2	R7119	CARBON R	R16J-1.2K	1	417341224	
PCB2	R7120	CARBON R	R16J-2.2K	1	417342224	
PCB2	R7121	CARBON R	R16J-3.9K	1	417343924	
PCB2	R7122	CARBON R	R16J-12K	1	417341234	
PCB2	R7123	CARBON R	R16J-330	1	417343314	
PCB2	R7124	CARBON R	R16J-470	1	417344714	
PCB2	R7125	CARBON R	R16J-560	1	417345614	
PCB2	R7126	CARBON R	R16J-820	1	417348214	
PCB2	R7127	CARBON R	R16J-1.2K	1	417341224	
PCB2	R7128	CARBON R	R16J-2.2K	1	417342224	
PCB2	R7129	CARBON R	R16J-3.9K	1	417343924	
PCB2	R7130	CARBON R	R16J-12K	1	417341234	
PCB2	R7151	CARBON R	R16J-2.2K	1	417342224	
PCB2	R7152	CARBON R	R16J-120	1	417341214	<PA>
PCB2	R7301	CARBON R	R16J-330	1	417343314	
PCB2	R7302	CARBON R	R16J-330	1	417343314	
PCB2	R7303	CARBON R	R16J-75	1	417347504	
PCB2	R9101	METAL R	RNU1/2WCJ-0.1	1	453531094	<DD, DC>
PCB2	R9101	METAL R	RNU1/2WCJ-0.22	1	453532294	<PA>
PCB2	R9102	METAL R	RNU1/2WCJ-8.2	1	453530824	
PCB2	RL901	RELAY	NRL-1P5A-DC9-179	1	25065669	!
PCB2	S7001	R ENCODE	EC12E2425WITH WASHER	1	25065655W	
PCB2	S7101	PUSH SW	NPS-111-S681	1	25035718	
PCB2	S7104	PUSH SW	NPS-111-S681	1	25035718	
PCB2	S7106	PUSH SW	NPS-111-S681	1	25035718	
PCB2	S7107	PUSH SW	NPS-111-S681	1	25035718	
PCB2	S7109	PUSH SW	NPS-111-S681	1	25035718	<PA>
PCB2	S7115	PUSH SW	NPS-111-S681	1	25035718	
PCB2	S7117	PUSH SW	NPS-111-S681	1	25035718	
PCB2	S7119	PUSH SW	NPS-111-S681	1	25035718	
PCB2	S7123	PUSH SW	NPS-111-S681	1	25035718	
PCB2	S7125	PUSH SW	NPS-111-S681	1	25035718	
PCB2	S7127	PUSH SW	NPS-111-S681	1	25035718	
PCB2	S7129	PUSH SW	NPS-111-S681	1	25035718	
PCB2	S7132	PUSH SW	NPS-111-S681	1	25035718	

PCB2	S7134	PUSH SW	NPS-111-S681	1	25035718	
PCB2	S7136	PUSH SW	NPS-111-S681	1	25035718	
PCB2	S7138	PUSH SW	NPS-111-S681	1	25035718	
PCB2	S7140	PUSH SW	NPS-111-S681	1	25035718	
PCB2	S7142	PUSH SW	NPS-111-S681	1	25035718	
PCB2	S7144	PUSH SW	NPS-111-S681	1	25035718	
PCB2	S7146	PUSH SW	NPS-111-S681	1	25035718	
PCB2	S7148	PUSH SW	NPS-111-S681	1	25035718	
PCB2	S7149	PUSH SW	NPS-111-S681	1	25035718	
PCB2	S7151	PUSH SW	NPS-111-S681	1	25035718	
PCB2	S7153	PUSH SW	NPS-111-S681	1	25035718	
PCB2	S7155	PUSH SW	NPS-111-S681	1	25035718	
PCB2	S7157	PUSH SW	NPS-111-S681	1	25035718	
PCB2	S7159	PUSH SW	NPS-111-S681	1	25035718	
PCB2	S7161	PUSH SW	NPS-111-S681	1	25035718	
PCB2	S7164	PUSH SW	NPS-111-S681	1	25035718	
PCB2	S7166	PUSH SW	NPS-111-S681	1	25035718	
PCB2	P701B	SOCKET	NSCT-26P2156	1	25052259	
PCB2	P901A	PLUG	NPLG-2P631	1	25055675	!
PCB2	P901A or	PLUG	1-1123724-2	(1)	25056402	!
PCB2	P902	AC OUTLET	AC-181-UL-11V	1	25053030	!, <DD, DC>
PCB2	P902	AC OUTLET	NSCT-2P2013	1	25052115	!, <PA>
PCB2	P911	PLUG	NPLG-2P631	1	25055675	
PCB2	P911 or	PLUG	1-1123724-2	(1)	25056402	
PCB2	P7201	ST JACK	MSJ-064-05A SR	1	25045783	
PCB2	P7201 or	ST JACK	YKB21-5005	(1)	25045724	
PCB2	P7301	PIN JACK	NPJ-7PDB477	1	25045680	
PCB2	E901	TRM(SCREW)	NEGITANSI M3	1	25065425	
PCB2	E7201	TRM	NTM-1P233(M1969)	1	25060302	
PCB2	E7301	RETAINER	(S)	1	27141931	
PCB2	E7601	TRM(SCREW)	NEGITANSI M3	1	25065425	
PCB2	F901A	FUSE HOL	NSCT-1P2031	1	25052133	!
PCB2	F901B	FUSE HOL	NSCT-1P2031	1	25052133	!
PCB2	F903A	FUSE HOL	NSCT-1P2031	1	25052133	!
PCB2	F903B	FUSE HOL	NSCT-1P2031	1	25052133	!
PCB2	JL6605	JUMPER LEAD	JL5 400 H	1	---	NSP
PCB2	JL6605A	WIRE HOL	NSCT-5P896	1	25051109	
PCB2	JL7101	JUMPER LEAD	JL8 200 H	1	---	NSP
PCB2	JL7101A	WIRE HOL	NSCT-8P899	1	25051112	
PCB2	JL7101B	WIRE HOL	NSCT-8P899	1	25051112	
PCB2	JL901	JUMPER LEAD	JL5 150 B	1	---	NSP
PCB2	JL901A	WIRE HOL	NSCT-5P876	1	25051089	
PCB2	JL9101	JUMPER LEAD	JL6 300 H	1	---	NSP
PCB2	JL9101A	WIRE HOL	NSCT-6P897	1	25051110	

PCB3 **U18** DSP & MICROPROCESSOR PC BOARD (NADG-8798-1E/ 1F)

PCB3 **U19** XM DIGITAL TRANSCEIVER PC BOARD (NADG-8799-1E)**<Note>** MDD, MDC Type only

PCB3

PCB3	CIRCUIT NO.	PART NAME	DESCRIPTION	Q'TY	PART NO. (SN)	REMARKS
PCB3	U131	PHT.CP 2pinsMount	TORX177L	1	24120127	124120129
PCB3	U131 or	PHT CP 3 pins mount	GPIFAV51RKF5 recieving	(1)	24120129	
PCB3	U132	PHTCP 2pinsMount	TORX177L	1	24120127	
PCB3	U132 or	PHT CP 3 pins Mount	GPIFAV51RKF5 recievin	1	24120129	
PCB3	U133	PHT CP 2pinsMount	TORX177L	1	24120127	
PCB3	U133 or	PHT CP 3 pins mount	GPIFAV51RKF5 recieving	(1)	24120129	
PCB3	Q131	IC	74HCU04F	1	222740046R2	

PCB3	Q151	IC	TC74VHC541FT(EKJ)	1	22274541E1R2TO		
PCB3	Q151 or	IC	SN74AHC541PWR	(1)	22274541IR2TI		
PCB3	Q151 or	IC	TC74VHC541FT	(1)	22274541ER2TO		
PCB3	Q152	IC	TC74HCT7007AF(EL_F)	1	222740077R2TO		
PCB3	Q171	IC	TC7WU04FU(TE12L_F)	1	22240935R2		
PCB3	Q201	IC	D707E001RFP250	1	22242309R3		
PCB3	Q281	IC	M12L16161A-7TG	1	22242278R3		
PCB3	Q281 or	IC	IC42S16100	(1)	22242123R2		
PCB3	Q281 or	IC	RMS116T(LF)	(1)	22242340R3		
PCB3	Q282	IC (DSP ROM)	ES29LV400	1	222W0045R3		W0
PCB3	Q301	IC	CS42518-CQZR-D	1	22242229R2	<DD, DC>	
PCB3	Q301	IC	CS42518-CQZR-D	1	22242229R2	<PA>	
PCB3	Q341	IC	NJM4580M-D	1	22241448R2		
PCB3	Q401	IC	NJM4580M-D	1	22241448R2		
PCB3	Q402	IC	NJM4580M-D	1	22241448R2		
PCB3	Q403	IC	NJM4580M-D	1	22241448R2		
PCB3	Q404	IC	NJM4580M-D	1	22241448R2		
PCB3	Q701	IC (MICROPROCESSOR)	M30622MWP-B06FP	1	22242364R3		
PCB3	Q710	IC	S-812C56AUA-C3K	1	22242207R2		
PCB3	Q741	IC	SI8008TM	1	22242323R2		
PCB3	Q742	IC	BD7820	1	22242300R2		
PCB3	Q762	IC	TA48033AF(TE16L_NQ)	1	22278033DR2TO		
PCB3	Q762 or	IC	BA33BC0FP	(1)	22278033DR2RH		
PCB3	Q762 or	IC	NJM2391DL1-33	(1)	22278033DR2JR		
PCB3	Q2001	IC	F2602E-01	1	22242266R2	<DD, DC>	
PCB3	Q2002	IC	AK4384ET	1	22242280R2	<DD, DC>	
PCB3	Q2003	IC	NJM4580M-D	1	22241448R2	<DD, DC>	
PCB3	Q2004	IC	TA48033AF(TE16L_NQ)	1	22278033DR2TO	<DD, DC>	
PCB3	Q2004 or	IC	BA33BC0FP	(1)	22278033DR2RH	<DD, DC>	
PCB3	Q2004 or	IC	NJM2391DL1-33	(1)	22278033DR2JR	<DD, DC>	
PCB3	Q2005	IC	78L05(NJM78L05UA)	1	222780053R2JR	<DD, DC>	
PCB3	Q2006	IC	TC74HCT7007AF(EL_F)	1	222740077R2TO	<DD, DC>	
PCB3	Q2007	IC	TC74VHC541FT(EKJ)	1	22274541E1R2TO	<DD, DC>	
PCB3	Q2007 or	IC	SN74AHC541PWR	(1)	22274541IR2TI	<DD, DC>	
PCB3	Q2007 or	IC	TC74VHC541FT	(1)	22274541ER2TO	<DD, DC>	
PCB3	Q702	TR	KRC104S	1	2216210R2		
PCB3	Q702 or	TR	RN1404	(1)	2214490R2		
PCB3	Q703	TR	KRA102S	1	2216220R2		
PCB3	Q703 or	TR	RN2402	(1)	2214530R2		
PCB3	Q751	TR	KRC104S	1	2216210R2		
PCB3	Q751 or	TR	RN1404	(1)	2214490R2		
PCB3	Q752	TR	KRA102S	1	2216220R2		
PCB3	Q752 or	TR	RN2402	(1)	2214530R2		
PCB3	X171	CRYSTAL	HC-49US24.576MHz	1	3010423		
PCB3	X171 or	CRYSTAL	HC-49/U03-24.576M	(1)	3010314		
PCB3	X701	CERA LOCK	CSTCR6M0055-R0	1	3010397R2		
PCB3	X2001	CRYSTAL	DSX840GA 45.1584MHz	1	3010420R2	<DD, DC>	
PCB3	X2001 or	CRYSTAL	FCX-02N 45.1584MHz	(1)	3010421R2	<DD, DC>	
PCB3	L131	CHOKE COIL	LBC2518T2R2M	1	231364M022R2		
PCB3	L133	CHOKE COIL	LBC2518T470M	1	231364M470R2		
PCB3	L134	CHOKE COIL	LBC2518T470M	1	231364M470R2		
PCB3	L171	CHOKE COIL	LBC2518T221M	1	231364M221R2		
PCB3	L172	EMIFIL	BK1608LM182-T	1	230958R1		
PCB3	L173	EMIFIL	BK1608LM182-T	1	230958R1		
PCB3	L201	CHOKE COIL	BLM21PG221SN1	1	230949R2		
PCB3	L202	CHOKE COIL	BLM21PG221SN1	1	230949R2		

PCB3	L203	EMIFIL	BK1608LL241-T	1	230959R1	
PCB3	L204	EMIFIL	ACF451832-333-T	1	230978R2	
PCB3	L281	CHOKE COIL	BLM21PG221SN1	1	230949R2	
PCB3	L301	CHOKE COIL	BLM21PG221SN1	1	230949R2	
PCB3	L302	CHOKE COIL	BLM21PG221SN1	1	230949R2	
PCB3	L303	CHOKE COIL	BLM21PG221SN1	1	230949R2	
PCB3	L312	EMIFIL	BK1608LM182-T	1	230958R1	
PCB3	L313	EMIFIL	BK1608LM182-T	1	230958R1	
PCB3	L741	CHOKE COIL	NCH-2541	1	231363K470	
PCB3	L2001	CHOKE COIL	LBC2518T2R2M	1	231364M022R2	<DD, DC>
PCB3	L2002	EMIFIL	BK1608LM182-T	1	230958R1	<DD, DC>
PCB3	L2003	CHOKE COIL	LBC2518T2R2M	1	231364M022R2	<DD, DC>
PCB3	L2004	CHOKE COIL	BLM21PG221SN1	1	230949R2	<DD, DC>
PCB3	L2005	CHOKE COIL	BLM21PG221SN1	1	230949R2	<DD, DC>
PCB3	D101	DIODE	RL1N4003	1	22380260	
PCB3	D101 or	DIODE	GP104003E	(1)	22380035	
PCB3	D102	DIODE	RL1N4003	1	22380260	
PCB3	D102 or	DIODE	GP104003E	(1)	22380035	
PCB3	D103	DIODE	RL1N4003	1	22380260	
PCB3	D103 or	DIODE	GP104003E	(1)	22380035	
PCB3	D104	C-DIODE	1SS352	1	223234R2	
PCB3	D104 or	C-DIODE	1SS355	(1)	223269R2	
PCB3	D104 or	C-DIODE	KDS4148U	(1)	223283R2	
PCB3	D104 or	C-DIODE	MA2J111	(1)	223279R2	
PCB3	D701	C-DIODE	1SS352	1	223234R2	
PCB3	D701 or	C-DIODE	1SS355	(1)	223269R2	
PCB3	D701 or	C-DIODE	KDS4148U	(1)	223283R2	
PCB3	D701 or	C-DIODE	MA2J111	(1)	223279R2	
PCB3	D702	C-DIODE	1SS352	1	223234R2	
PCB3	D702 or	C-DIODE	1SS355	(1)	223269R2	
PCB3	D702 or	C-DIODE	KDS4148U	(1)	223283R2	
PCB3	D702 or	C-DIODE	MA2J111	(1)	223279R2	
PCB3	D703	C-DIODE	1SS352	1	223234R2	
PCB3	D703 or	C-DIODE	1SS355	(1)	223269R2	
PCB3	D703 or	C-DIODE	KDS4148U	(1)	223283R2	
PCB3	D703 or	C-DIODE	MA2J111	(1)	223279R2	
PCB3	D704	C-DIODE	1SS352	1	223234R2	
PCB3	D704 or	C-DIODE	1SS355	(1)	223269R2	
PCB3	D704 or	C-DIODE	KDS4148U	(1)	223283R2	
PCB3	D704 or	C-DIODE	MA2J111	(1)	223279R2	
PCB3	D706	C-DIODE	1SS352	1	223234R2	
PCB3	D706 or	C-DIODE	1SS355	(1)	223269R2	
PCB3	D706 or	C-DIODE	KDS4148U	(1)	223283R2	
PCB3	D706 or	C-DIODE	MA2J111	(1)	223279R2	
PCB3	D707	ZENER D	UDZS5.1B	1	224550510R2	
PCB3	D711	C-DIODE	1SS352	1	223234R2	
PCB3	D711 or	C-DIODE	1SS355	(1)	223269R2	
PCB3	D711 or	C-DIODE	KDS4148U	(1)	223283R2	
PCB3	D711 or	C-DIODE	MA2J111	(1)	223279R2	
PCB3	D712	C-DIODE	1SS352	1	223234R2	
PCB3	D712 or	C-DIODE	1SS355	(1)	223269R2	
PCB3	D712 or	C-DIODE	KDS4148U	(1)	223283R2	
PCB3	D712 or	C-DIODE	MA2J111	(1)	223279R2	
PCB3	D741	C-DIODE	CRS09(TE85L_Q)	1	223274R2	
PCB3	D742	C-DIODE	1SS352	1	223234R2	
PCB3	D742 or	C-DIODE	1SS355	(1)	223269R2	

PCB3	D742 or	C-DIODE	KDS4148U	(1)	223283R2	
PCB3	D742 or	C-DIODE	MA2J111	(1)	223279R2	
PCB3	D743	C-DIODE	1SS352	1	223234R2	
PCB3	D743 or	C-DIODE	1SS355	(1)	223269R2	
PCB3	D743 or	C-DIODE	KDS4148U	(1)	223283R2	
PCB3	D743 or	C-DIODE	MA2J111	(1)	223279R2	
PCB3	D2001	ZENER D	UDZS5.1B	1	224550510R2	<DD, DC>
PCB3	C102	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB3	C103	VR C	CE04W16V-100M(VR)	1	394641017	
PCB3	C131	C-CERA C	CC725CH1H-101J1	1	342101014R1	
PCB3	C132	C-CERA C	CK725B1C-104K1	1	332121045R1	
PCB3	C133	C-CERA C	CC725CH1H-080D1	1	342100802R1	
PCB3	C137	VR C	CE04W16V-100M(VR)	1	394641017	
PCB3	C138	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB3	C141	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB3	C142	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB3	C143	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB3	C145	VR C	CE04W16V-100M(VR)	1	394641017	
PCB3	C146	C-CERA C	CC725CH1H-102J1	1	342101024R1	
PCB3	C151	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB3	C152	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB3	C171	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB3	C172	C-CERA C	CC725CH1H-060D1	1	342100602R1	
PCB3	C173	C-CERA C	CC725CH1H-060D1	1	342100602R1	
PCB3	C201	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB3	C202	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB3	C203	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB3	C204	VX C	CE04W50V-10M(VX)	1	393381007	
PCB3	C205	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB3	C206	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB3	C207	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB3	C208	C-CERA C	CC725CH1H-101J1	1	342101014R1	
PCB3	C221	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB3	C222	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB3	C223	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB3	C224	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB3	C241	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB3	C242	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB3	C243	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB3	C244	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB3	C261	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB3	C262	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB3	C263	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB3	C271	VR C	CE04W6.3V-470M(VR)	1	394624717	
PCB3	C272	VR C	CE04W6.3V-470M(VR)	1	394624717	
PCB3	C281	VR C	CE04W6.3V-220M(VR)	1	394622217	
PCB3	C282	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB3	C283	VR C	CE04W6.3V-220M(VR)	1	394622217	
PCB3	C284	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB3	C285	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB3	C286	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB3	C301	VX C	CE04W6.3V-470M(VX)	1	393324717	
PCB3	C302	VX C	CE04W6.3V-470M(VX)	1	393324717	
PCB3	C303	VX C	CE04W6.3V-470M(VX)	1	393324717	
PCB3	C304	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB3	C306	VX C	CE04W50V-47M(VX)	1	393384707	

PCB3	C307	C-CERA C	CK725F1E-104Z1	1	332161040R1
PCB3	C308	VR C	CE04W16V-100M(VR)	1	394641017
PCB3	C309	C-CERA C	CK725F1E-104Z1	1	332161040R1
PCB3	C310	C-CERA C	CK725B1H-222K1	1	332102225R1
PCB3	C311	C-CERA C	CK725B1H-473K1	1	332104735R1
PCB3	C312	C-CERA C	CK725F1E-104Z1	1	332161040R1
PCB3	C313	C-CERA C	CK725F1E-104Z1	1	332161040R1
PCB3	C319	C-CERA C	CK725B1H-221K1	1	332102215R1
PCB3	C321	VX C	CE04W50V-10M(VX)	1	393381007
PCB3	C322	VX C	CE04W50V-10M(VX)	1	393381007
PCB3	C323	VX C	CE04W50V-10M(VX)	1	393381007
PCB3	C324	VX C	CE04W50V-10M(VX)	1	393381007
PCB3	C325	TF C	ECQ-B50V-222J	1	374722224
PCB3	C326	TF C	ECQ-B50V-222J	1	374722224
PCB3	C331	C-CERA C	CC725CH1H-330J1	1	342103304R1
PCB3	C332	C-CERA C	CC725CH1H-330J1	1	342103304R1
PCB3	C333	C-CERA C	CC725CH1H-330J1	1	342103304R1
PCB3	C334	C-CERA C	CC725CH1H-330J1	1	342103304R1
PCB3	C341	C-CERA C	CC725CH1H-101J1	1	342101014R1
PCB3	C342	C-CERA C	CC725CH1H-101J1	1	342101014R1
PCB3	C401	TF C	ECQ-B50V-472J	1	374724724
PCB3	C402	TF C	ECQ-B50V-472J	1	374724724
PCB3	C403	TF C	ECQ-B50V-472J	1	374724724
PCB3	C404	TF C	ECQ-V50V-333J	1	374723334
PCB3	C405	TF C	ECQ-B50V-472J	1	374724724
PCB3	C406	TF C	ECQ-B50V-472J	1	374724724
PCB3	C407	TF C	ECQ-B50V-472J	1	374724724
PCB3	C408	TF C	ECQ-B50V-472J	1	374724724
PCB3	C411	TF C	ECQ-B50V-681J	1	374726814
PCB3	C412	TF C	ECQ-B50V-681J	1	374726814
PCB3	C413	TF C	ECQ-B50V-681J	1	374726814
PCB3	C414	TF C	ECQ-B50V-153J	1	374721534
PCB3	C415	TF C	ECQ-B50V-681J	1	374726814
PCB3	C416	TF C	ECQ-B50V-681J	1	374726814
PCB3	C417	TF C	ECQ-B50V-681J	1	374726814
PCB3	C418	TF C	ECQ-B50V-681J	1	374726814
PCB3	C421	TF C	ECQ-B50V-681J	1	374726814
PCB3	C422	TF C	ECQ-B50V-681J	1	374726814
PCB3	C423	TF C	ECQ-B50V-681J	1	374726814
PCB3	C424	TF C	ECQ-B50V-153J	1	374721534
PCB3	C425	TF C	ECQ-B50V-681J	1	374726814
PCB3	C426	TF C	ECQ-B50V-681J	1	374726814
PCB3	C427	TF C	ECQ-B50V-681J	1	374726814
PCB3	C428	TF C	ECQ-B50V-681J	1	374726814
PCB3	C531	VX C	CE04W25V-220M(VX)	1	393352217
PCB3	C532	VX C	CE04W25V-220M(VX)	1	393352217
PCB3	C701	VR C	CE04W16V-100M(VR)	1	394641017
PCB3	C702	VR C	CE04W16V-100M(VR)	1	394641017
PCB3	C704	EDL C	DX-5R5L224	1	3000079
PCB3	C705	VR C	CE04W16V-100M(VR)	1	394641017
PCB3	C706	VR C	CE04W50V-4.7M(VR)	1	394680477
PCB3	C708	C-CERA C	CK725F1E-104Z1	1	332161040R1
PCB3	C709	C-CERA C	CK725F1E-104Z1	1	332161040R1
PCB3	C710	C-CERA C	CK725F1E-104Z1	1	332161040R1
PCB3	C711	C-CERA C	CC725CH1H-101J1	1	342101014R1
PCB3	C712	C-CERA C	CC725CH1H-101J1	1	342101014R1

PCB3	C713	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB3	C714	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB3	C715	C-CERA C	CK725B1H-102K1	1	332101025R1	
PCB3	C716	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB3	C717	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB3	C718	C-CERA C	CK725B1H-102K1	1	332101025R1	
PCB3	C720	C-CERA C	CK725B1H-102K1	1	332101025R1	
PCB3	C721	C-CERA C	CK725B1H-102K1	1	332101025R1	
PCB3	C722	C-CERA C	CK725B1H-102K1	1	332101025R1	
PCB3	C723	C-CERA C	CK725B1H-102K1	1	332101025R1	
PCB3	C724	C-CERA C	CK725B1H-102K1	1	332101025R1	
PCB3	C725	C-CERA C	CK725B1H-102K1	1	332101025R1	
PCB3	C741	VR C	CE04W16V-470M(VR)	1	394644717	
PCB3	C742	C-CERA C	CK725F1E-104Z1	1	332161040R1	
PCB3	C743	VR C	CE04W6.3V-1000M(VR)	1	394621027	
PCB3	C745	VR C	CE04W16V-100M(VR)	1	394641017	
PCB3	C751	VR C	CE04W50V-1M(VR)	1	394680107	
PCB3	C752	VR C	CE04W6.3V-470M(VR)	1	394624717	
PCB3	C753	C-CERA C	CK732B1A-105K	1	337361055R2	
PCB3	C764	VX C	CE04W50V-10M(VX)	1	393381007	
PCB3	C765	VR C	CE04W16V-100M(VR)	1	394641017	
PCB3	C2001	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DD, DC>
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PCB3	C2015	C-CERA C	CK725F1E-104Z1	1	332161040R1	<DD, DC>
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PCB3	R105	C-CARBON R	RN72K1J-105JE	1	435031054R1	
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PCB3	R131	C-CARBON R	RN72K1J-750JE	1	435037504R1	
PCB3	R132	C-CARBON R	RN72K1J-100JE	1	435031004R1	
PCB3	R133	C-CARBON R	RN72K1J-224JE	1	435032244R1	
PCB3	R134	C-CARBON R	RN72K1J-103JE	1	435031034R1	
PCB3	R141	C-CARBON R	RN72K1J-470JE	1	435034704R1	
PCB3	R142	C-CARBON R	RN72K1J-470JE	1	435034704R1	
PCB3	R143	C-CARBON R	RN72K1J-470JE	1	435034704R1	
PCB3	R162	C-CARBON R	RN72K1J-221JE	1	435032214R1	
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PCB3	R171	C-CARBON R	RN72K1J-105JE	1	435031054R1	
PCB3	R181	C-CARBON R	RN72K1J-103JE	1	435031034R1	
PCB3	R182	C-CARBON R	RN72K1J-103JE	1	435031034R1	
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PCB3	R207	C-CARBON R	RN72K1J-103JE	1	435031034R1	
PCB3	R221	C-CARBON R	RN72K1J-470JE	1	435034704R1	
PCB3	R250	C-CARBON R	RN72K1J-331JE	1	435033314R1	
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PCB3	R612	C-CARBON R	RN72K1J-473JE	1	435034734R1	
PCB3	R613	C-CARBON R	RN72K1J-105JE	1	435031054R1	
PCB3	R614	C-CARBON R	RN72K1J-103JE	1	435031034R1	
PCB3	R616	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB3	R617	C-CARBON R	RN72K1J-103JE	1	435031034R1	
PCB3	R618	C-CARBON R	RN72K1J-222JE	1	435032224R1	
PCB3	R619	C-CARBON R	RN72K1J-102JE	1	435031024R1	
PCB3	R621	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB3	R622	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB3	R623	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB3	R625	C-CARBON R	RN72K1J-470JE	1	435034704R1	
PCB3	R626	C-CARBON R	RN72K1J-470JE	1	435034704R1	
PCB3	R627	C-CARBON R	RN72K1J-222JE	1	435032224R1	
PCB3	R628	C-CARBON R	RN72K1J-222JE	1	435032224R1	
PCB3	R629	C-CARBON R	RN72K1J-222JE	1	435032224R1	<PA>
PCB3	R630	C-CARBON R	RN72K1J-222JE	1	435032224R1	
PCB3	R631	C-CARBON R	RN72K1J-470JE	1	435034704R1	
PCB3	R632	C-CARBON R	RN72K1J-470JE	1	435034704R1	
PCB3	R633	C-CARBON R	RN72K1J-470JE	1	435034704R1	
PCB3	R634	C-CARBON R	RN72K1J-470JE	1	435034704R1	
PCB3	R635	C-CARBON R	RN72K1J-470JE	1	435034704R1	
PCB3	R636	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB3	R637	C-CARBON R	RN72K1J-470JE	1	435034704R1	
PCB3	R638	C-CARBON R	RN72K1J-470JE	1	435034704R1	
PCB3	R639	C-CARBON R	RN72K1J-470JE	1	435034704R1	
PCB3	R640	C-CARBON R	RN72K1J-470JE	1	435034704R1	
PCB3	R642	C-CARBON R	RN72K1J-470JE	1	435034704R1	
PCB3	R643	C-CARBON R	RN72K1J-470JE	1	435034704R1	
PCB3	R644	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB3	R645	C-CARBON R	RN72K1J-470JE	1	435034704R1	
PCB3	R649	C-CARBON R	RN72K1J-103JE	1	435031034R1	
PCB3	R650	C-CARBON R	RN72K1J-103JE	1	435031034R1	
PCB3	R651	C-CARBON R	RN72K1J-103JE	1	435031034R1	
PCB3	R653	C-CARBON R	RN72K1J-103JE	1	435031034R1	
PCB3	R659	C-CARBON R	RN72K1J-470JE	1	435034704R1	
PCB3	R660	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB3	R661	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB3	R662	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB3	R663	C-CARBON R	RN72K1J-473JE	1	435034734R1	
PCB3	R664	C-CARBON R	RN72K1J-103JE	1	435031034R1	
PCB3	R665	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB3	R666	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB3	R667	C-CARBON R	RN72K1J-221JE	1	435032214R1	
PCB3	R668	C-CARBON R	RN72K1J-102JE	1	435031024R1	
PCB3	R669	C-CARBON R	RN72K1J-102JE	1	435031024R1	
PCB3	R670	C-CARBON R	RN72K1J-102JE	1	435031024R1	
PCB3	R673	C-CARBON R	RN72K1J-224JE	1	435032244R1	
PCB3	R676	C-CARBON R	RN72K1J-470JE	1	435034704R1	
PCB3	R677	C-CARBON R	RN72K1J-470JE	1	435034704R1	
PCB3	R678	C-CARBON R	RN72K1J-470JE	1	435034704R1	
PCB3	R679	C-CARBON R	RN72K1J-470JE	1	435034704R1	
PCB3	R680	C-CARBON R	RN72K1J-470JE	1	435034704R1	

PCB3	R681	C-CARBON R	RN72K1J-103JE	1	435031034R1	
PCB3	R682	C-CARBON R	RN72K1J-103JE	1	435031034R1	
PCB3	R683	C-CARBON R	RN72K1J-472JE	1	435034724R1	
PCB3	R684	C-CARBON R	RN72K1J-472JE	1	435034724R1	
PCB3	R685	C-CARBON R	RN72K1J-472JE	1	435034724R1	
PCB3	R686	C-CARBON R	RN72K1J-472JE	1	435034724R1	
PCB3	R687	C-CARBON R	RN72K1J-472JE	1	435034724R1	
PCB3	R688	C-CARBON R	RN72K1J-472JE	1	435034724R1	
PCB3	R689	C-CARBON R	RN72K1J-472JE	1	435034724R1	
PCB3	R690	C-CARBON R	RN72K1J-272JE	1	435032724R1	
PCB3	R691	C-CARBON R	RN72K1J-272JE	1	435032724R1	
PCB3	R692	C-CARBON R	RN72K1J-272JE	1	435032724R1	
PCB3	R693	C-CARBON R	RN72K1J-272JE	1	435032724R1	
PCB3	R694	C-CARBON R	RN72K1J-273JE	1	435032734R1	
PCB3	R695	C-CARBON R	RN72K1J-273JE	1	435032734R1	
PCB3	R696	C-CARBON R	RN72K1J-103JE	1	435031034R1	
PCB3	R701	C-CARBON R	RN72K1J-102JE	1	435031024R1	
PCB3	R702	METAL R	RNU1/2WCJ-2.2	1	453530224	
PCB3	R741	C-CARBON R	RN72K1J-821JE	1	435038214R1	
PCB3	R742	C-CARBON R	RN72K1J-152JE	1	435031524R1	
PCB3	R743	C-CARBON R	RN72K1J-153JE	1	435031534R1	
PCB3	R744	C-CARBON R	RN72K1J-000JE	1	435030004R1	
PCB3	R745	C-CARBON R	RN72K1J-393JE	1	435033934R1	
PCB3	R746	C-CARBON R	RN72K1J-393JE	1	435033934R1	
PCB3	R747	C-CARBON R	RN72K1J-333JE	1	435033334R1	
PCB3	R751	C-CARBON R	RN72K1J-103JE	1	435031034R1	
PCB3	R752	C-CARBON R	RN72K1J-222JE	1	435032224R1	
PCB3	R753	C-CARBON R	RN72K1J-102JE	1	435031024R1	
PCB3	R770	C-CARBON R	RN72K1J-333JE	1	435033334R1	<PA>
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PCB3	R2001	C-CARBON R	RN72K1J-104JE	1	435031044R1	<DD, DC>
PCB3	R2002	C-CARBON R	RN72K1J-104JE	1	435031044R1	<DD, DC>
PCB3	R2003	C-CARBON R	RN72K1J-104JE	1	435031044R1	<DD, DC>
PCB3	R2004	C-CARBON R	RN72K1J-104JE	1	435031044R1	<DD, DC>
PCB3	R2005	C-CARBON R	RN72K1J-104JE	1	435031044R1	<DD, DC>
PCB3	R2006	C-CARBON R	RN72K1J-102JE	1	435031024R1	<DD, DC>
PCB3	R2007	C-CARBON R	RN72K1J-102JE	1	435031024R1	<DD, DC>
PCB3	R2008	C-CARBON R	RN72K1J-101JE	1	435031014R1	<DD, DC>
PCB3	R2009	C-CARBON R	RN72K1J-101JE	1	435031014R1	<DD, DC>
PCB3	R2010	C-CARBON R	RN72K1J-681JE	1	435036814R1	<DD, DC>
PCB3	R2011	C-CARBON R	RN72K1J-105JE	1	435031054R1	<DD, DC>
PCB3	R2012	C-CARBON R	RN72K1J-101JE	1	435031014R1	<DD, DC>
PCB3	R2013	C-CARBON R	RN72K1J-331JE	1	435033314R1	<DD, DC>
PCB3	R2014	C-CARBON R	RN72K1J-331JE	1	435033314R1	<DD, DC>
PCB3	R2015	C-CARBON R	RN72K1J-331JE	1	435033314R1	<DD, DC>
PCB3	R2016	C-CARBON R	RN72K1J-000JE	1	435030004R1	<DD, DC>
PCB3	R2021	C-CARBON R	RN72K1J-222JE	1	435032224R1	<DD, DC>
PCB3	R2022	C-CARBON R	RN72K1J-222JE	1	435032224R1	<DD, DC>
PCB3	R2023	C-CARBON R	RN72K1J-104JE	1	435031044R1	<DD, DC>
PCB3	R2024	C-CARBON R	RN72K1J-104JE	1	435031044R1	<DD, DC>
PCB3	R2025	C-CARBON R	RN72K1J-222JE	1	435032224R1	<DD, DC>

PCB3	R2026	C-CARBON R	RN72K1J-222JE	1	435032224R1	<DD, DC>
PCB3	R2027	C-CARBON R	RN72K1J-222JE	1	435032224R1	<DD, DC>
PCB3	R2028	C-CARBON R	RN72K1J-222JE	1	435032224R1	<DD, DC>
PCB3	R2029	C-CARBON R	RN72K1J-332JE	1	435033324R1	<DD, DC>
PCB3	R2030	C-CARBON R	RN72K1J-332JE	1	435033324R1	<DD, DC>
PCB3	R2031	METAL O R	RS1/2WBJ-22	1	443522204	<DD, DC>
PCB3	R2032	METAL O R	RS1/2WBJ-22	1	443522204	<DD, DC>
PCB3	R2033	C-CARBON R	RN72K1J-220JE	1	435032204R1	<DD, DC>
PCB3	R2034	C-CARBON R	RN72K1J-220JE	1	435032204R1	<DD, DC>
PCB3	R2035	C-CARBON R	RN72K1J-000JE	1	435030004R1	<DD, DC>
PCB3	R2036	C-CARBON R	RN72K1J-000JE	1	435030004R1	<DD, DC>
PCB3	R2044	C-CARBON R	RN72K1J-221JE	1	435032214R1	<DD, DC>
PCB3	R2046	C-CARBON R	RN72K1J-000JE	1	435030004R1	<DD, DC>
PCB3	R2047	METAL O R	RS1/2WBJ-22	1	443522204	<DD, DC>
PCB3	P101A	SOCKET	NSCT-13P2106	1	25052209	
PCB3	P131	PIN JACK	NPJ-1PDO554	1	25045772	
PCB3	P131 or	PIN JACK	NPJ-1PDBL291	(1)	25045473	
PCB3	P302A	SOCKET	NSCT-14P2194	1	25052297	
PCB3	P303A	SOCKET	NSCT-14P2194	1	25052297	
PCB3	P304A	SOCKET	NSCT-3P2183	1	25052286	
PCB3	P701A	SOCKET	52492-2620	1	25053109	
PCB3	P777	SHLD PLT	---	1	27150508A	
PCB3	P2001	SOCKET	CAM-C16	1	25053104R2	<DD, DC>
PCB3	P2004A	PLUG	IMSA-9163B-10G	1	25056587A	
PCB3	P2005A	PLUG	IMSA-9163B-16G	1	25056588A	
PCB3	P2006A	PLUG	IMSA-9163B-04G	1	25056586A	
PCB3	E2001	TRM(SCREW)	NEGITANSI M3	1	25065425	<DD, DC>
PCB3	E2002	TRM(SCREW)	NEGITANSI M3	1	25065425	<DD, DC>
PCB3	E2003	RETAINER	(XM)	1	27142044	<DD, DC>
PCB3	JL101	JUMPER LEAD	JL9 200 B	1	---	NSP, <DD, DC>
PCB3	JL101A	WIRE HOL	NSCT-9P880	1	25051093	<DD, DC>
PCB3	JL101B	WIRE TRAP	NPLG-9P592	1	25055630	<DD, DC>
PCB3	JL703B	WIRE TRAP	NPLG-3P586	1	25055624	
PCB3	JL5502B	WIRE TRAP	NPLG-7P590	1	25055628	<DD, DC>

PCB4 **U20** **VIDEO & SPEAKER TERMINAL PC BOARD (NAVD-8804-1A/ 1C)**

PCB4

	CIRCUIT NO.	PART NAME	DESCRIPTION	Q'TY	PART NO. (SN)	REMARKS
PCB4	Q3001	IC	AN15880A-VT	1	22242319R3	
PCB4	Q9022	IC	BA00BC0WT-V5	1	22242321	
PCB4	Q9022A	SCREW	3P+10FN(3BC)	1	82143010GR	
PCB4	Q9031	IC	MPC2905BHF	1	22278005DBNE	
PCB4	Q9031 or	IC	TA4805S	(1)	222780059TOS	
PCB4	Q9031A	SCREW	3P+10FN(3BC)	1	82143010GR	
PCB4	Q9031B	HEAT SINK	RAD-231	1	27160592	
PCB4	Q6601	TR	KRC105M	1	2215830	
PCB4	Q6601 or	TR	RN1205	(1)	2214660	
PCB4	Q6601 or	TR	DTC123JS	(1)	2213640	
PCB4	Q6602	TR	KRC105M	1	2215830	
PCB4	Q6602 or	TR	RN1205	(1)	2214660	
PCB4	Q6602 or	TR	DTC123JS	(1)	2213640	
PCB4	Q6603	TR	KRC105M	1	2215830	
PCB4	Q6603 or	TR	RN1205	(1)	2214660	
PCB4	Q6603 or	TR	DTC123JS	(1)	2213640	
PCB4	Q6604	TR	KRC105M	1	2215830	
PCB4	Q6604 or	TR	RN1205	(1)	2214660	

PCB4	Q6604 or	TR	DTC123JS	(1)	2213640	
PCB4	Q9001	TR	2SC2235-Y(TPE6_F)	1	2211654	
PCB4	Q9001 or	TR	2SC2235-O(TPE6_F)	(1)	2211653	
PCB4	Q9002	TR	KRC105M	1	2215830	
PCB4	Q9002 or	TR	RN1205	(1)	2214660	
PCB4	Q9002 or	TR	DTC123JS	(1)	2213640	
PCB4	D6600	DIODE	1SS133(DS)	1	223280	
PCB4	D6600 or	DIODE	1SS133	(1)	223163	
PCB4	D6603	DIODE	1SS133(DS)	1	223280	
PCB4	D6603 or	DIODE	1SS133	(1)	223163	
PCB4	D6605	DIODE	1SS133(DS)	1	223280	
PCB4	D6605 or	DIODE	1SS133	(1)	223163	
PCB4	D6607	DIODE	1SS133(DS)	1	223280	
PCB4	D6607 or	DIODE	1SS133	(1)	223163	
PCB4	D9001	DIODE	RL1N4003	1	22380260	
PCB4	D9001 or	DIODE	GP104003E	(1)	22380035	
PCB4	D9005	ZENER D	DZ-36BSD	1	224853604	
PCB4	D9005 or	ZENER D	MTZJ36D	(1)	224473604	
PCB4	D9011	DIODE	D3SBA20	1	22380271F	
PCB4	D9012	DIODE	RL1N4003	1	22380260	
PCB4	D9012 or	DIODE	GP104003E	(1)	22380035	
PCB4	D9013	DIODE	RL1N4003	1	22380260	
PCB4	D9013 or	DIODE	GP104003E	(1)	22380035	
PCB4	D9014	DIODE	1SS133(DS)	1	223280	
PCB4	D9014 or	DIODE	1SS133	(1)	223163	
PCB4	D9015	DIODE	1SS133(DS)	1	223280	
PCB4	D9015 or	DIODE	1SS133	(1)	223163	
PCB4	D9016	ZENER D	DZ-5.6BSB	1	224850562	
PCB4	D9016 or	ZENER D	MTZJ5.6B	(1)	224470562	
PCB4	D9017	DIODE	RL1N4003	1	22380260	
PCB4	D9017 or	DIODE	GP104003E	(1)	22380035	
PCB4	D9022	DIODE	RL1N4003	1	22380260	
PCB4	D9022 or	DIODE	GP104003E	(1)	22380035	
PCB4	L6600	S COIL	S-1.3C	1	231176S	<PA>
PCB4	L6601	S COIL	S-1.3C	1	231176S	<PA>
PCB4	L6602	S COIL	S-1.3C	1	231176S	<PA>
PCB4	L6603	S COIL	S-1.3C	1	231176S	<PA>
PCB4	L6604	S COIL	S-1.3C	1	231176S	<PA>
PCB4	L6605	S COIL	S-1.3C	1	231176S	<PA>
PCB4	L6606	S COIL	S-1.3C	1	231176S	<PA>
PCB4	C3001	VR C	CE04W16V-100M(VR)	1	394641017	
PCB4	C3002	CERA C	CK45F50V-223Z	1	335622230	
PCB4	C3003	VR C	CE04W50V-22M(VR)	1	394682207	
PCB4	C3004	VR C	CE04W6.3V-470M(VR)	1	394624717	
PCB4	C3005	CERA C	CK45F50V-223Z	1	335622230	
PCB4	C3006	VR C	CE04W16V-100M(VR)	1	394641017	
PCB4	C3007	VR C	CE04W6.3V-470M(VR)	1	394624717	
PCB4	C3011	VR C	CE04W6.3V-470M(VR)	1	394624717	
PCB4	C3012	CERA C	CK45F50V-223Z	1	335622230	
PCB4	C3013	VR C	CE04W16V-100M(VR)	1	394641017	
PCB4	C3014	CERA C	CK45F50V-223Z	1	335622230	
PCB4	C3015	CERA C	CK45F50V-223Z	1	335622230	
PCB4	C3017	VR C	CE04W6.3V-470M(VR)	1	394624717	
PCB4	C3018	VR C	CE04W6.3V-470M(VR)	1	394624717	
PCB4	C3021	VR C	CE04W6.3V-470M(VR)	1	394624717	
PCB4	C3022	VR C	CE04W16V-100M(VR)	1	394641017	

PCB4	C3023	CERA C	CK45F50V-223Z	1	335622230	
PCB4	C3024	VR C	CE04W6.3V-470M(VR)	1	394624717	
PCB4	C3031	TF C	ECQ-B50V-102J	1	374721024	
PCB4	C3032	TF C	ECQ-B50V-102J	1	374721024	
PCB4	C3033	VR C	CE04W50V-10M(VR)	1	394681007	
PCB4	C3034	VR C	CE04W50V-10M(VR)	1	394681007	
PCB4	C3035	CERA C	CK45F50V-223Z	1	335622230	
PCB4	C3036	VR C	CE04W50V-10M(VR)	1	394681007	
PCB4	C3037	VR C	CE04W50V-10M(VR)	1	394681007	
PCB4	C3038	CERA C	CK45F50V-223Z	1	335622230	
PCB4	C3039	TF C	ECQ-B50V-102J	1	374721024	
PCB4	C3040	VR C	CE04W50V-10M(VR)	1	394681007	
PCB4	C3041	VR C	CE04W50V-10M(VR)	1	394681007	
PCB4	C3042	CERA C	CK45F50V-223Z	1	335622230	
PCB4	C3043	TF C	ECQ-B50V-102J	1	374721024	
PCB4	C3044	VR C	CE04W50V-10M(VR)	1	394681007	
PCB4	C3045	VR C	CE04W50V-10M(VR)	1	394681007	
PCB4	C3046	VR C	CE04W50V-10M(VR)	1	394681007	
PCB4	C3047	VR C	CE04W50V-10M(VR)	1	394681007	
PCB4	C3048	VR C	CE04W50V-10M(VR)	1	394681007	
PCB4	C3049	VR C	CE04W50V-10M(VR)	1	394681007	
PCB4	C3050	TF C	ECQ-B50V-102J	1	374721024	
PCB4	C3051	VR C	CE04W50V-10M(VR)	1	394681007	
PCB4	C3052	VR C	CE04W50V-10M(VR)	1	394681007	
PCB4	C3053	VR C	CE04W50V-10M(VR)	1	394681007	
PCB4	C3056	CERA C	CK45B50V-102K	1	335321025	
PCB4	C3057	CERA C	CK45B50V-102K	1	335321025	
PCB4	C3058	CERA C	CK45B50V-102K	1	335321025	
PCB4	C3059	CERA C	CK45B50V-102K	1	335321025	
PCB4	C3060	CERA C	CK45B50V-102K	1	335321025	
PCB4	C3061	VR C	CE04W50V-10M(VR)	1	394681007	
PCB4	C3062	TF C	ECQ-B50V-101K	1	374721015	
PCB4	C3063	TF C	ECQ-B50V-101K	1	374721015	
PCB4	C3064	TF C	ECQ-B50V-101K	1	374721015	
PCB4	C3065	TF C	ECQ-B50V-101K	1	374721015	
PCB4	C3066	TF C	ECQ-B50V-101K	1	374721015	
PCB4	C3067	TF C	ECQ-B50V-101K	1	374721015	
PCB4	C3068	CERA C	CC45CH50V-470J	1	345344704	
PCB4	C3069	CERA C	CC45CH50V-470J	1	345344704	
PCB4	C3070	CERA C	CC45CH50V-470J	1	345344704	
PCB4	C6600	TF C	ECQ-B50V-103J	1	374721034	
PCB4	C6602	TF C	ECQ-B50V-103J	1	374721034	
PCB4	C6603	TF C	ECQ-B50V-103J	1	374721034	
PCB4	C6605	TF C	ECQ-B50V-103J	1	374721034	
PCB4	C6607	TF C	ECQ-B50V-103J	1	374721034	<DD, DC>
PCB4	C6607	TF C	ECQ-B50V-103J	1	374721034	<PA>
PCB4	C6640	TF C	ECQ-B50V-103J	1	374721034	<PA>
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PCB4	C6650	TF C	ECQ-B50V-102J	1	374721024	<PA>
PCB4	C6651	TF C	ECQ-B50V-102J	1	374721024	<PA>
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PCB4	C6656	TF C	ECQ-B50V-102J	1	374721024	<PA>
PCB4	C9001	VR C	CE04W63V-470M(VR)	1	394674717S	
PCB4	C9005	VR C	CE04W50V-47M(VR)	1	394684707	
PCB4	C9006	CERA C	CK45F50V-223Z	1	335622230	
PCB4	C9011	VR C	CE04W16V-10000M(VR)	1	394641037S	
PCB4	C9012	MMT C	MMT50V-334J	1	375523344	
PCB4	C9013	VR C	CE04W50V-3.3M(VR)	1	394680337	
PCB4	C9024	CERA C	CK45F50V-223Z	1	335622230	
PCB4	C9025	VR C	CE04W6.3V-470M(VR)	1	394624717	
PCB4	C9031	CERA C	CK45F50V-223Z	1	335622230	
PCB4	C9032	VR C	CE04W6.3V-470M(VR)	1	394624717	
PCB4	C9033	VR C	CE04W16V-100M(VR)	1	394641017	
PCB4	R3001	CARBON R	R16J-75	1	417347504	
PCB4	R3002	CARBON R	R16J-75	1	417347504	
PCB4	R3003	CARBON R	R16J-75	1	417347504	
PCB4	R3011	CARBON R	R16J-75	1	417347504	
PCB4	R3012	CARBON R	R16J-75	1	417347504	
PCB4	R3013	CARBON R	R16J-75	1	417347504	
PCB4	R3014	CARBON R	R16J-75	1	417347504	
PCB4	R3015	CARBON R	R16J-75	1	417347504	
PCB4	R3016	CARBON R	R16J-75	1	417347504	
PCB4	R3017	CARBON R	R16J-75	1	417347504	
PCB4	R3018	CARBON R	R16J-75	1	417347504	
PCB4	R3019	CARBON R	R16J-75	1	417347504	
PCB4	R3020	CARBON R	R16J-75	1	417347504	
PCB4	R3021	CARBON R	R16J-75	1	417347504	
PCB4	R3022	CARBON R	R16J-75	1	417347504	
PCB4	R3023	CARBON R	R16J-75	1	417347504	
PCB4	R3024	CARBON R	R16J-75	1	417347504	
PCB4	R3025	CARBON R	R16J-75	1	417347504	
PCB4	R3026	CARBON R	R16J-75	1	417347504	
PCB4	R3027	CARBON R	R16J-75	1	417347504	
PCB4	R3028	CARBON R	R16J-75	1	417347504	
PCB4	R3029	CARBON R	R16J-75	1	417347504	
PCB4	R3030	CARBON R	R16J-75	1	417347504	
PCB4	R3031	CARBON R	R16J-75	1	417347504	
PCB4	R3032	CARBON R	R16J-75	1	417347504	
PCB4	R3033	CARBON R	R16J-75	1	417347504	
PCB4	R3034	CARBON R	R16J-75	1	417347504	
PCB4	R3038	METAL R	RNU1/2WCJ-0.22	1	453532294	
PCB4	R3039	METAL R	RNU1WCJ-3.3	1	453630334	
PCB4	R6600	CARBON R	R16J-22	1	417342204	<PA>
PCB4	R6601	CARBON R	R16J-22	1	417342204	<PA>
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PCB4	R6615	CARBON R	R16J-22	1	417342204	<PA>
PCB4	R6616	CARBON R	R16J-22	1	417342204	<PA>
PCB4	R6690	METAL O R	RS1/2WBJ-10	1	443521004	
PCB4	R6691	METAL O R	RS1/2WBJ-390	1	443523914	
PCB4	R6692	METAL O R	RS1/2WBJ-390	1	443523914	
PCB4	R9001	METAL O R	RS1WBJ-220	1	443622214	
PCB4	R9002	CARBON R	R16J-8.2K	1	417348224	
PCB4	R9003	CARBON R	R16J-8.2K	1	417348224	
PCB4	R9004	CARBON R	R16J-33K	1	417343334	
PCB4	R9005	DIODE	RL1N4003	1	22380260	
PCB4	R9005 or	DIODE	GP104003E	(1)	22380035	
PCB4	R9011	METAL R	RNU1/2WCJ-4.7	1	453530474	
PCB4	R9012	METAL R	RNU1/2WCJ-1	1	453530104	
PCB4	R9013	METAL R	RNU1/2WCJ-1	1	453530104	
PCB4	R9014	CARBON R	R16J-100K	1	417341044	
PCB4	R9024	CARBON R	R16J-100K	1	417341044	
PCB4	R9025	CARBON R	R16J-8.2K	1	417348224	
PCB4	R9026	CARBON R	R16J-33K	1	417343334	
PCB4	R9031	METAL R	RNU2WCJ-3.3	1	452730334F	
PCB4	R9032	METAL R	RNU2WCJ-3.3	1	452730334F	
PCB4	R9033	METAL R	RNU1/2WCJ-0.22	1	453532294	
PCB4	R9035	METAL R	RNU2WCJ-1.8	1	452730184F	
PCB4	R9036	METAL R	RNU2WCJ-1.8	1	452730184F	
PCB4	RL6600	RELAY	NRL-2P5A-DC24-158	1	25065618	
PCB4	RL6600 or	RELAY	NRL-2P5A-DC24-129	(1)	25065563A	
PCB4	RL6602	RELAY	NRL-2P5A-DC24-158	1	25065618	
PCB4	RL6602 or	RELAY	NRL-2P5A-DC24-129	(1)	25065563A	
PCB4	RL6603	RELAY	NRL-2P5A-DC24-158	1	25065618	
PCB4	RL6603 or	RELAY	NRL-2P5A-DC24-129	(1)	25065563A	
PCB4	RL6605	RELAY	NRL-2P5A-DC24-158	1	25065618	
PCB4	RL6605 or	RELAY	NRL-2P5A-DC24-129	(1)	25065563A	
PCB4	RL6607	RELAY	NRL-2P5A-DC24-158	1	25065618	
PCB4	RL6607 or	RELAY	NRL-2P5A-DC24-129	(1)	25065563A	
PCB4	P2004B	SOCKET	IMSA-9163S-10A	1	25053107	
PCB4	P2005B	SOCKET	IMSA-9163S-16A	1	25053108	
PCB4	P2006B	SOCKET	IMSA-9163S-04A	1	25053106	
PCB4	P3001	PIN JACK	NPJ-10PDBY621	1	25045842	
PCB4	P3001 or	PIN JACK	NPJ-10PDBY478	(1)	25045681	
PCB4	P3002	PIN JACK	NPJ-5PDBY622	1	25045843	
PCB4	P3002 or	PIN JACK	NPJ-5PDBY479	(1)	25045682	
PCB4	P3003	PIN JACK	NPJ-10PDBY621	1	25045842	
PCB4	P3003 or	PIN JACK	NPJ-10PDBY478	(1)	25045681	
PCB4	P3004	PIN JACK	NPJ-3PDGLR620	1	25045841	
PCB4	P3004 or	PIN JACK	NPJ-3PDGLR623	(1)	25045844	
PCB4	P3005	PIN JACK	NPJ-9PDGLRGLRGLR563	1	25045781	
PCB4	P3005 or	PIN JACK	NPJ-9PDGLR519	(1)	25045731	
PCB4	P6601	TRM	NTM-6PDMC392	1	25060463	
PCB4	P6602	TRM	NTM-8PDMC393	1	25060464	
PCB4	P9001	HOLDER	HOLDER(CLAMP)	1	27190540-1	<PA>
PCB4	JL901B	WIRE TRAP	NPLG-5P588	1	25055626	
PCB4	JL6600B	SOCKET	NSCT-7P99	1	25050271	
PCB4	JL6603B	SOCKET	NSCT-9P101	1	25050273	
PCB4	JL6604B	SOCKET	NSCT-4P96	1	25050268	
PCB4	JL6605B	SOCKET	NSCT-5P97	1	25050269	
PCB4	JL9101B	SOCKET	NSCT-6P98	1	25050270	

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